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ABSTRACT

Intended to be used in conjunction with the 1977 edition, this 1978 supplement contains descriptions and college credit recommendations for approximately 320 courses offered on the postsecondary level by thirty-eight noncollegiate organizations. An introductory section provides (1) background on the Program on Noncollegiate Sponsored Instruction, and its 1976 follow-up study to assess its impact in New York state, (2) a description of the review process, (3) question-and-answer sections for students and college administrators and faculty, and (4) directions for using the supplement. Section I describes and evaluates courses which have been reviewed since the publication of the 1977 Guide. Introductory paragraphs are generally limited to organizations whose courses have not been previously included. Section II focuses on courses conducted by organizations under the Comprehensive Employment and Training Act (CETA). Section III contains modifications of previously evaluated courses which resulted from the Program's regular re-review process. All material about the modified course is printed here so that it is not necessary to consult the 1977 Guide. Each course description in the three sections consists of the following information: location, length, dates, objective, instruction, and credit recommendation. A course index is also included, arranged by organization name. (ELG)

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A GUIDE TO EDUCATIONAL PROGRAMS IN NONCOLLEGIATE ORGANIZATIONS

The University of the State of New York
Program on Noncollegiate Sponsored Instruction
Cultural Education Center
Empire State Plaza
Albany, New York 12230
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1978 Supplement

CE 019 572

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FOREWORD

This 1978 Supplement to *A Guide to Educational Programs in Noncollegiate Organizations* continues the work of the Regents Program on Noncollegiate Sponsored Instruction in providing guidance to postsecondary institutions, not only in New York State but also throughout the country, in the awarding of credit for courses conducted by noncollegiate organizations. The Supplement contains descriptions and credit recommendations for some 320 new courses in a wide variety of subject areas offered by 38 organizations, which include business and industry, labor unions, professional and voluntary associations, government agencies, and other organizations whose primary purpose is not education. While the central training headquarters of these organizations are located in New York State, Connecticut, Georgia, Illinois, Massachusetts, New Jersey, Ohio, and Oklahoma, a number of the evaluated courses are nationwide in scope. This Supplement is intended to be used in conjunction with the 1977 edition of the *Guide*, which contains credit recommendations for almost 800 previously evaluated courses conducted by 67 organizations.

The Board of Regents began the Program in early 1974 because of its commitment to the goal of making postsecondary education more accessible to persons of all ages. For this same purpose the Regents established the College Proficiency Examination Program in 1963 and the Regents External Degree Program in 1970. The Program on Noncollegiate Sponsored Instruction has broadened the approach by establishing an evaluation and credit recommendation system to help link the educational activities of noncollegiate organizations with postsecondary institutions. The Program therefore plays an important role in the development of lifelong education in the United States by helping persons gain academic recognition for learning they acquire in settings other than the college campus.

The Program has greatly benefited from the cooperation of The Consortium of the California State University and Colleges, the Commonwealth of Pennsylvania Department of Education, the Office of External Programs—Vermont State Colleges, the Connecticut Board of State Academic Awards, and until September 1977, the American Council on Education. This collaboration helps all of us attain the goals of more effectively serving students and of better using all of the educational resources of the country, especially educational programs in the world of work.

In the future the Program will continue to follow a thorough and objective evaluation process as it evaluates additional courses from a wide range of organizations. Therefore, postsecondary institutions can remain confident that the Program's credit recommendations provide reliable academic standards on which to base credit awards for courses which persons have taken in noncollegiate organizations. Moreover, such academic recognition is motivating more persons to enroll as full- or part-time students in degree programs and is fostering increased cooperation between these two sectors of the nation's education system.

Gordon M. Ambach

President of The University
of the State of New York and
Commissioner of Education

October 1978

ACKNOWLEDGMENTS

The University of the State of New York wishes to thank the many individuals and organizations who have contributed to the Program on Noncollegiate Sponsored Instruction and to this 1978 Supplement to *A Guide to Educational Programs in Noncollegiate Organizations*.

Special acknowledgment is given to the Carnegie Corporation of New York which has generously provided funding for the activities of the Program over the past four years. In addition, a contract from the National Institute of Education enabled the Program to conduct a follow-up study to determine its initial impact in New York State. Also, the New York State Department of Labor provided a grant to enable the Program to begin serving persons who complete training programs conducted under the Comprehensive Employment and Training Act (CETA) and the Youth Employment and Demonstration Projects Act (YEDPA). We are likewise grateful to the Fund for the Improvement of Postsecondary Education of the Department of Health, Education, and Welfare for its recent grant to make it possible for the Program to expand its follow-up services to participating noncollegiate organizations and to develop effective models of educational advisement in work-related settings. We are pleased to join with these organizations in increasing educational options for students of every age.

We thank the following persons who served as advisers in the initial development of the Program: Gerald Arffa, Program Administrator, Corporate Education Services, General Electric Company; Janet Beck, Coordinator of Continuing Education, State University College at Brockport; Martha E. Church, President, Hood College; J. Douglas Conner, Executive Secretary, American Association of Collegiate Registrars and Admissions Officers; Harold Delaney, Associate Director, American Association of State Colleges and Universities; Frank G. Dickey, Acting Dean, Department of Academic Studies, North Carolina School of Fine Arts; and Ethel Walsh, Commissioner, U.S. Equal Employment Opportunity Commission.

A number of consultants who have played an important role in the expansion of the Program should also be given special recognition: Frederick H. Antil, Vice President, American Management Associations; Karen E. Asherman (formerly the assistant director of the Program); William Berliner, Professor of Management, College of Business and Public Administration, New York University; Dorothy Fenwick, Associate Dean of Metropolitan College, St. Louis University; Betty Lall, Professor, New York State School of Industrial and Labor Relations, Cornell University; Vito V. Soranno, Deputy Personnel Director, Office of Court Administration of the State of New York; Inspector Frederick D. Thumhart, New York State Division of State Police; and William M. Welty, Director, Executive Programs, Pace University Graduate School.

We are particularly indebted to the subject matter experts who served as evaluators for the Program. (See Appendix B.) The reliability of the credit recommendations listed in this Supplement are the result of their thorough and thoughtful reviews of noncollegiate sponsored courses and programs.

In addition, we are grateful for the support and cooperation of the administrators and faculties of the colleges and universities in New York State, the Connecticut Board for State Academic Awards, the Office of External Programs—Vermont State Colleges, the many offices within the New York State Education Department that have provided assistance, and the following organizations: American Society of Mechanical Engineers; Council of Deans of Engineering Schools in New York State; Criminal Justice Educators Association of New York State; Institute of Electrical and Electronic Engineers; Mid-Atlantic Association of Colleges of Business Administration; the National Joint Apprenticeship and Training Committee for the Electrical Industry; Consortium of Rochester Area Colleges; and the Hudson-Mohawk Association of Colleges and Universities.

Finally, we acknowledge the work of Carol Aiken of the Program staff who was responsible for the preparation and editing of the Supplement.

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INTRODUCTION

BACKGROUND

HISTORY OF THE PROGRAM

The Program on Noncollegiate Sponsored Instruction is conducted by The University of the State of New York. The purpose of the Program is to review formal educational programs and courses sponsored by noncollegiate organizations and to make appropriate credit recommendations for the courses evaluated. These organizations include business and industry, labor unions, professional and voluntary associations, government agencies, and other organizations whose primary function is not education. The credit recommendations are intended to guide colleges and universities as they consider awarding credit to persons who have successfully completed noncollegiate sponsored instruction. In this way students are assisted in receiving academic recognition for the learning gained in the courses. The Program serves noncollegiate organizations located not only in New York State but throughout the country.

The Program is based on the position that it is sound educational practice to grant academic credit for high quality educational programs conducted by noncollegiate organizations, provided that the courses are at the college level, and that the credit is appropriate to an individual's educational program. Moreover, experience has shown that the awarding of credit for prior learning will in many cases motivate students to enroll in formal postsecondary programs of study.

The first step in the development of the Program came in January 1974 when The University of the State of New York initiated a pilot study. During this preliminary stage, evaluations were made of 102 courses sponsored by eight organizations located in New York State. In the process, credit recommendations were established when courses were found to be at the college level, and the components of a model for a reliable and workable review system were identified. The results of the pilot study were published in December 1974 in the first edition of *A Guide to Educational Programs in Noncollegiate Organizations*.

In August 1974 the American Council on Education joined The University of the State of New York in the conduct of the Program. Both agreed to operate under jointly established evaluative policies and procedures approved by both the Council's Commission on Educational Credit and the New York State Board of Regents (see Appendix C). During 1976 the Consortium of the California State University and Colleges and the Commonwealth of Pennsylvania Department of Education joined in the operation of the Program in their respective states. (See Appendix A for more information about the Program in California and Pennsylvania.)

The 1976 edition of the *Guide*, which was a joint publication of The University of the State of New York and the American Council on Education, reported on courses reviewed during the period from November 1974 to October 1975. Descriptions of the courses reviewed during the pilot study were also included. In September 1977 the American Council on Education withdrew from the joint Program and began to operate its own independent program.

The 1977 edition of the *Guide* reported on the 761 courses conducted by 67 noncollegiate organizations which had been evaluated by The University of the State of New York and had received credit recommendations between January 1974 and July 1977. This 1978 Supplement reports on the 320 courses conducted by 38 organizations which were evaluated and given credit recommendations between July 1977 and July 1978. The Supplement also contains modifications of introductory paragraphs and/or course exhibits that appeared in the 1977 edition of the *Guide*. These modifications have been made as a result of the Program's regular rereview process to determine if changes have occurred in previously evaluated courses and, if so, whether the credit recommendations should still apply. The 1978 Supplement, as well as the 1977 *Guide*, are made available to postsecondary institutions and noncollegiate organizations throughout the nation.

The University of the State of New York is the most comprehensive educational organization in the nation. It encompasses and has responsibility for all educational concerns in the State, including private and public higher institutions, elementary and secondary schools, museums, libraries, historical societies, and other agencies whose primary function is education. The Regents and the Commissioner of Education determine the State's educational policies and establish standards for maintaining quality schools. Among other things, they charter educational institutions and organizations, approve and supervise academic programs leading to

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college degrees, and regulate the preliminary education requirements for admission to the practice of most professions in the State. The New York State Education Department is the executive and administrative arm of the Board of Regents of The University of the State of New York. The Program is administered by the Department's Office on Noncollegiate Sponsored Instruction.

FOLLOW-UP STUDY

In the fall of 1976, the Program began a one-year follow-up study, under a contract with the National Institute of Education, to determine if the Program was beginning to achieve its objectives. The study sought to answer the following questions about practices relating to the Program in New York State during the 1975-76 academic year. Have the credit recommendations been used, and how have they been used by colleges and universities? How have the credit recommendations affected noncollegiate organizations? Who are the student users of the credit recommendations, and what effect have the recommendations had on them? The major findings of the study are summarized here.

A majority (68%) of the 170 postsecondary institutions in New York State that responded to the college survey reported that they had an institution-wide or department policy on using the credit recommendations or are developing such a policy. This represents nearly a doubling in the number of colleges granting credit for noncollegiate sponsored courses since the Program began in 1974. (A more recent informal survey reported that more than 350 colleges and universities in the country have made use of the Program's recommendations.) The records of 65 of the institutions indicated that nearly 1,100 students applied for evaluated courses during the 1975-76 academic year, and that 89 percent of them received either credit or course exemptions.

Of the 39 noncollegiate organizations that were surveyed, more than half reported that, since their courses were evaluated, enrollment in those courses which received recommendations had increased, and student performance had improved. Thirty-six percent of the responding organizations were revising additional courses in accordance with the Program's evaluative policies and procedures. Seventy-two percent of the organizations now use these same evaluative criteria when they develop new courses for their employees or members.

The 469 responding students reported that they received credit for 82 percent of the courses that they submitted to colleges during the 1975-76 academic year. Courses were submitted to colleges in New York State and to colleges in other states throughout the nation. Thirty-five percent of the responding students who were not enrolled in college at the time the credit recommendations were established reported that they were motivated to enroll in a college course or degree program because they received credit for noncollegiate sponsored instruction. Since most of the respondents were already enrolled in college, the credit granted to most students for the recommended courses was used to accelerate their study in college programs.

The follow-up study provided the Program with a valuable instrument for internally assessing its initial impact in New York State, and the results indicate that it is meeting its established objectives. Moreover, at a useful and early stage in the Program's development, the study enabled the staff to systematically assess its operational policies and procedures. The purpose of these improvements was to bring about better services to students, noncollegiate organizations, and colleges. For more detailed information on the study, please contact the Program's office listed on the title page of the Supplement.

THE REVIEW PROCESS

The credit recommendations in this Supplement are established through a thorough and objective evaluation process. The following description is provided to enable users of the Supplement to understand this process. A more detailed explanation of the evaluative policies and procedures followed in the Program will be found in Appendix C.

Noncollegiate organizations participate in the Program on a voluntary basis. Each sponsoring organization selects courses for review with the assistance of Program staff. Only educational programs or courses conducted on a formal basis and with official approval of the sponsoring organization are considered for review. Informal training or job experience is not reviewed.

Courses must present what is thought to be college-level material. Classroom-based courses conducted over an extended period of time should contain at least 30 hours of instruction; those offered on an intensive basis should be at least 35 hours in duration. Such courses must have a prescribed program of instruction and be taught by qualified instructors. All courses must include an appropriate method of evaluating student performance. In the case of correspondence and independent study courses, there must be supervised final examinations administered under secure conditions.

Organizations supply the following information for each course submitted for review:

1. A syllabus describing in detail the objectives, content, and methodology of the course.
2. Instructional materials used (textbooks, audiovisual materials, case studies, etc.).
3. Procedures used for measuring the performance of students in the course and samples of the evaluation procedures.
4. Criteria and procedures by which instructors are selected.
5. Educational background and work experience of the students taking the course.
6. Duration of the course.

Each organization also supplies information on the administration of its educational activities, including an explanation of procedures for course development and revision, of procedures for recordkeeping and reporting, and of controls to insure uniformity of quality and course content when a course is offered in several locations.

Review teams are normally composed of three persons who are selected from college and university faculties and from noncollegiate organizations. They are selected on the basis of their knowledge and experience in the subject area of the courses to be reviewed. Evaluators are suggested by postsecondary institutions, professional and educational associations, and noncollegiate organizations. (A list of evaluators is found in Appendix B.)

Review sessions are usually conducted at the location of the organization offering the courses. Organizational staff members familiar with the courses are available to answer questions that may arise during the review of the course materials. After a thorough review of all the information and materials supplied by the organization, the team members first decide if a course is at the college level. If it is, they then determine the category of credit (described in the section "How to Use the Supplement"), the number of credit hours, and the appropriate subject area or areas to recommend. Whenever the team establishes a credit recommendation for a course, it has determined that the method of assessment is adequate to judge that students successfully completing the course have mastered the subject matter. The team members also review each course exhibit (the description of the course that will appear in the Supplement) to insure that it adequately describes the course.

In some cases, the team may evaluate together a group of two or more related courses which individually are too short to be eligible for review. If appropriate, a single credit recommendation is established for the group of courses, and it applies only when a student has completed all of them.

In other cases, the team may recommend that no academic credit be granted. Reasons given for failure to recommend credit have included: (1) the limited scope or highly technical nature of a course compared to college programs; (2) the lack of college-level material in the course; (3) the absence of adequate evaluation of student performance; and (4) failure to present sufficient materials on which to make a judgment about a course. Courses for which credit recommendations are not made are not listed in the Supplement.

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QUESTIONS AND ANSWERS FOR STUDENTS

How do courses receive a credit recommendation? Each sponsoring organization selects the courses it would like to have reviewed. The course materials are then given a thorough review by subject matter experts. They determine if a course is at the college level and make the appropriate credit recommendation.

Who may submit courses for evaluation? Only eligible noncollegiate organizations may submit for evaluation educational programs or courses conducted on a formal basis. Individual students may *not* submit courses for review.

How are the credit recommendations used? Primarily to obtain college credit or advanced college placement. It may also be possible to use the credit recommendations for entry into new areas of employment, for job advancement, to obtain salary benefits, for licensure and certification, and for personal assessment.

How many credits is each course worth? The recommended number of credits for each course is listed at the end of each course exhibit. This recommendation is made by a team of subject matter experts when it has determined that a course is at the college level.

These are recommended credits. A college is not required to grant a student credit in the amount recommended by the reviewers nor, in fact, is a college limited to that amount should it feel that a person's performance in the course deserves additional credit.

Is college credit automatically earned when someone successfully completes a course listed in the GUIDE? No. Successful completion of such a course results in actual college credit only when the course is accepted toward a degree at a postsecondary institution. If you have already taken one of the courses listed in the *Guide*, or plan to take one, you are advised to contact the admissions office at the college in which you are interested to determine the acceptability of the course for academic credit.

Are policies for granting credit the same in all colleges? No. Each college sets its own policies, and these vary from college to college. Some colleges may refuse to grant credit for successful completion of a course conducted by a noncollegiate organization for which another college would grant credit. It should also be noted that in some instances a college may not grant credit but may, instead, waive a prerequisite or a required course.

Each institution and, in many cases, each academic unit and department within each institution, sets its own policies for granting credit. The admissions office in a college should be able to guide you to the appropriate official responsible for making the decision for granting credit. If you plan to enroll at a college within New York State, you may find the booklet *Granting Credit for Noncollegiate Sponsored Instruction in New York State* helpful. This booklet is available through the Program's office listed on the title page of this publication. It includes the policy of each New York State institution in regard to accepting the credit recommendations, other specific information about each institution's practices, and the source of additional information.

Do most colleges grant credit for noncollegiate sponsored courses? A recent survey showed that approximately 70 percent of the responding colleges and universities in New York State use the credit recommendations established by the Program on Noncollegiate Sponsored Instruction as a basis for awarding college credit.

What if a college wants more information about the courses I took or the evaluation process? Refer the college official to the Program on Noncollegiate Sponsored Instruction, which operates an advisory service to provide information to colleges on evaluated courses. The address of the office is:

Program on Noncollegiate Sponsored Instruction
New York State Education Department
Cultural Education Center, Room 5C85
Empire State Plaza
Albany, NY 12230
Telephone: (518) 474-8592

When will credit be awarded? In most cases a person should apply for credit when formally applying for admission to a college. Some colleges may grant credit only provisionally at that time and withhold full credit until the student successfully completes either some courses they offer or a specific number of credits.

Is there a minimum acceptable performance level before credit will be awarded? Yes. A college will consider granting academic credit to a student for a course only after it has received an official record from the sponsoring organization verifying that the person *successfully* completed the course.

How are student records for courses listed in the GUIDE reported to colleges? The organization sponsoring a course you have completed will provide an official record at your request. The official record will enable a college official to verify that you successfully completed the course and the date of completion. The source of official student records for each organization is noted in the introduction under each organizational heading.

Is credit awarded for courses listed in the GUIDE as "good" as credit earned on a campus? Yes. When an institution grants you credit for a course sponsored by a noncollegiate organization, this credit has as much value toward a degree as does credit earned through regular college courses.

Do colleges charge a fee for granting credit for courses listed in the GUIDE? A recent survey indicates that less than 10 percent of the 170 New York State colleges responding to the survey charge students a fee for crediting noncollegiate sponsored courses. Generally, institutions that charge a fee do so to defray the costs of evaluating an individual student's prior learning, which may include noncollegiate sponsored courses.

Can credit be earned for a course completed in the past or taken from a former employer? Yes. The credit recommendation established for each course described in the *Guide* can be used by anyone who successfully completed the course during the period listed in the "Dates" section of each course exhibit. When "Present" is given as the second date, this indicates that the course is still being offered by the organization as of the publication date for this Supplement to the *Guide*. Each organization listed in the *Guide* keeps records of its present and former employees who completed the courses during the periods indicated and will supply them upon request.

Can one earn credit for courses offered by noncollegiate organizations but not listed in the GUIDE? Yes. Some institutions will evaluate students' knowledge individually, often by means of examinations. There are also nationwide proficiency examination programs which may be used to validate study in courses not listed in the *Guide*. A growing number of colleges and universities accept credits earned through these examinations.

The New York State Education Department administers the College Proficiency Examination Program (CPEP) and the Regents External Degree Examinations (REDE). Besides being offered four times a year in New York State, most CPEP and RED examinations are administered around the world by the American College Testing Program (ACT). For information on testing in New York State write to:

RED-CPE Program
New York State Education Department
Cultural Education Center, Room 5D45
Empire State Plaza
Albany, NY 12230

For information on testing outside of New York State write to:

ACT Proficiency Examination Program
American College Testing Program
P.O. Box 168
Iowa City, IA 52240

The College Entrance Examination Board administers the College-Level Examination Program (CLEP). To obtain more information on CLEP write to:

College-Level Examination Program
P.O. Box 1821
Princeton, NJ 08540

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QUESTIONS AND ANSWERS FOR ADMINISTRATORS AND FACULTY

Should the applicant receive special consideration for education gained in noncollegiate organizations? Credit for those courses evaluated by the Program on Noncollegiate Sponsored Instruction should be considered on the same basis as credit accepted by transcript from another institution. In this connection, institutions generally will require the applicant to furnish full information about previous college-level studies and a proposed future program of study before granting credit for such courses.

Are the credit recommendations advisory only? Yes. Each institution is free to accept, modify, or reject them in accord with its stated academic policies and procedures. The recommendations are based on consultants' review of content, level of complexity, educational quality, and objectives of the programs and courses offered by the noncollegiate organizations.

How should a grade from a noncollegiate organization be interpreted? Grading systems vary widely among noncollegiate organizations. Some organizations use letter or numerical grades, while many organizations award certificates of successful completion on a pass/fail basis, and no attempt has been made to convert them to traditional grading systems. A recommendation of academic credit for a course taken in a noncollegiate organization should, therefore, be interpreted as being applicable when the student presents official evidence of having successfully completed or passed the course.

How should credit recommended for educational programs in noncollegiate organizations be applied to the individual's program of study? Credit can be validly granted in either required or elective areas, provided the particular course and credit recommendation are appropriate to the individual's program of study.

What credit should be granted if the educational program in a noncollegiate organization duplicates specific courses in a postsecondary institution? In these instances credit for a course taken in a noncollegiate organization should be granted only if the student has not completed a comparable college course. Most often, however, these educational programs do not exactly duplicate college courses, but do contain instruction applicable to a general area of collegiate study. In such cases credit can be granted toward required or elective courses in the area, depending on the instructional program at the institution and the specific educational objectives of the individual.

What credit should be granted when the applicant has completed several courses in a noncollegiate organization which are apparently in the same subject area and at the same level? An appropriate official should carefully review the descriptions of all courses in the same subject area which the person has completed and for which credit is recommended. If it appears that instruction is duplicated among the several courses, officials may wish to apply the credit recommendations so as to avoid granting duplicate credit for the courses.

What is the maximum amount of credit that should be granted for courses taken in noncollegiate organizations? The amount of credit granted should be appropriate to the individual's educational background and goals, and to the policies of the institution. Thus, the maximum amount of credit awarded for courses taken in noncollegiate organizations will vary according to individual circumstances.

Should the applicant present official records proving successful completion of an educational program conducted by a noncollegiate organization? Educational institutions should require the applicant to verify the fact that he or she has successfully completed such a program or course by having official records submitted. The introduction for each organization listed in the *Guide* indicates the appropriate source of official student records.

HOW TO USE THE SUPPLEMENT

A Guide to Educational Programs in Noncollegiate Organizations is intended for use in the academic counseling of students. The credit recommendations and course descriptions provide information to education officials as they consider granting credit to students for learning acquired in noncollegiate settings.

The 1978 Supplement is designed to be used in conjunction with the 1977 edition of the *Guide*, and *not* as a separate reference. Courses reviewed since the publication of the 1977 *Guide* and previously evaluated courses which have been modified are contained in the Supplement. In order to obtain a complete picture of all of the participating organizations and all of the courses which have received credit recommendations from the Program on Noncollegiate Sponsored Instruction from the beginning of the Program in January 1974, up through the publication of the Supplement, it is necessary to consult both the 1977 *Guide* and the Supplement.

In order to make the best use of the Supplement, careful consideration should be given to this section. It explains how to locate a particular course exhibit, how to interpret course exhibits, how the credit recommendations might be used, how to receive assistance from the Program on Noncollegiate Sponsored Instruction, and exactly how to use the Supplement in conjunction with the 1977 *Guide*.

The courses listed in the *Guide* represent only a small sample of the educational programs conducted by the participating organizations. In addition, many other organizations in the United States conduct a wide range of high quality educational programs for their employees or members. These are not included in the *Guide* because they have not been submitted for review. Readers are cautioned against making adverse judgments about the educational programs of any noncollegiate organization merely because they are not listed here. Students who have completed such courses and are seeking college credit for them should be given every consideration in accordance with institutional policies and practices.

Only those courses for which credit recommendations have been made are listed in the *Guide*. However, the Program office will inform college officials, upon request, if a particular course for one of the participating organizations was reviewed and no credit was recommended.

Format of the Supplement

The Supplement is divided into three sections. Section I contains course exhibits for all courses which have been reviewed and given credit recommendations since the publication of the 1977 *Guide*. Introductory paragraphs appear only for new organizations, those which have not previously had courses reviewed by the Program. (The only exceptions are the Federal Aviation Administration and the Grumman Corporation.)

Section II contains exhibits for courses conducted by organizations under the Comprehensive Employment and Training Act (CETA) and recommended for credit. This section describes the organizations sponsoring the courses and provides brief background information on CETA.

Section III contains modifications of introductory paragraphs and course exhibits that appeared in the 1977 *Guide*. These modifications are a result of the Program's regular re-review process, which insures the continued validity of the credit recommendations and provides the most up-to-date information about the organizations and previously evaluated courses. It should be noted that where a modification does exist within an introduction or course exhibit, the entire introduction or course exhibit is reprinted, and not just the modification. Therefore, if an introduction or course exhibit appears in this section of the Supplement, an interested individual need only read the introduction or exhibit as it appears here without referring to the 1977 *Guide*. It is emphasized that only those introductions or course exhibits that contain modifications are included in this section; individuals seeking general information about organizations or specific information about courses not found in this section should consult both Sections I and II of the Supplement and the 1977 *Guide*.

How to Locate a Course Exhibit

An individual interested in finding out about a given course should first consult the Supplement's Course Index. If the course is listed there, it is either a new course or an updated exhibit of a course which appears in the 1977 *Guide*. If a course is not listed in the Supplement's Course Index, the Course Index of the 1977 *Guide* should be checked. It is important to remember that in those cases where an organizational introduction or course exhibit appears in both the Supplement and the 1977 *Guide*, the version appearing in the Supplement is the most up-to-date and should be used.

Each course in the Supplement is listed in the Course Index alphabetically by title under the name of the organization that offers it. Therefore, it is necessary to identify the sponsoring organization before a course can be located. In those cases in which a group of courses that form an integrated program are reviewed, the program title is also listed in the Course Index.

How to Read a Course Exhibit

After each heading in Sections I and II for an organization that has not had courses listed previously in the *Guide*, there is an introduction that provides general information about the organization, its training and educational activities, and the source of official records of student performance in its courses. Organizational introductions which appeared in the *Guide* and which have since been modified are found in Section III of the Supplement (with the exception of the Federal Aviation Administration and the Grumman Corporation as noted above). The introductions for all other organizations for which courses have been evaluated are found in the 1977 *Guide*.

Each course exhibit identifies the course and provides specific information about the course content and the credit recommendation. Each course exhibit provides the following information:

Title: Official course title used by the organization. In some cases, an additional title or subtitle has been assigned by the review team for purposes of explanation and clarity; this title, listed in parentheses below the official title, is not used by the organization.

Course Number: Official course number, when provided by the organization, in parentheses following the course title.

Location: The site(s) where the course is offered. Correspondence and independent study courses are identified as such.

Length: Duration of the course in contact hours and, when appropriate, in days or weeks. The length is followed by any additional relevant information describing the course. The term "residential" indicates that the students reside at the location where the course is given for the duration of the course. Correspondence and independent study courses are identified as such.

Dates: The beginning and ending dates of the course, expressed by month and year. The dates cover the period during which the course has been offered with substantially the same content and procedures as at the time of its review; the credit recommendation applies to a person who successfully completed the course during that period. The first date indicates the time from which the recommendation first applies; the second, the time at which the recommendation ceases to apply. When "Present" is given as the second date, it indicates that the recommendation applies as of the publication date for this Supplement. Credit recommendations are backdated no more than 10 years prior to the review date.

Objective: The purpose for which the course is offered.

Instruction: A description of the major topics covered, and teaching methods, materials, and equipment used. Together, the objective and instructional description supplement the credit recommendation by providing essential information about the nature of the course.

Credit recommendation: The category of credit, the number of semester hours recommended, the appropriate subject area(s), and the date reviewed.

1. *Categories of Credit:*

   a. Vocational Certificate. This category includes course work normally found in year-long certificate programs which are designed to provide students with occupational skills; in many two-year institutions, they are also found in curricula leading to associate degrees in technical programs. Course content is specialized, and the accompanying shop training emphasizes procedural rather than analytical skills.

   b. Lower Division Baccalaureate/Associate Degree. This category includes course work found in programs leading to the Associate in Arts, Associate in Science, and Associate in Applied Science degrees, and introductory-level course work normally found in baccalaureate programs. Emphasis is on learning basic principles that have broad, judgmental application.

   c. Upper Division Baccalaureate. This category includes course work usually completed during the last two years of a baccalaureate program. The courses generally involve specialization of a theoretical or analytical nature beyond the introductory level.

d. Graduate Degree. This category includes course work leading to a graduate degree. The courses tend to be oriented toward independent study, original research, critical analysis, and the scholarly and professional application of the specialized knowledge within a discipline. NOTE: In some instances, credit is recommended in more than one category. A decision must be made by the college as to which category of credit best applies to a student's educational program.

2. *Semester Hours:* All credit recommendations are made in semester hours. Credit recommendations are *not* derived by simple arithmetic conversion of contact hours to semester hours; the review teams base their recommendations on both the range and level of complexity of the subject matter covered and the number of contact hours.
3. *Subject Area(s):* In alphabetical order, the recommended subject area(s) in which credit might be applied. The designation of these general areas does not exclude the application of the credit recommendation to other areas not mentioned in the course exhibit.
4. *Date of Review:* The month and year in which the credit recommendation was established is listed in parentheses following the subject area(s).

Verifying Student Records

Students who apply for credit for courses conducted by noncollegiate organizations should be required to submit official records to verify that a course was successfully completed. Each organization will supply official records at a student's request. The source of official records for each organization is identified in the introduction section for each organization.

Awarding Credit Based on the Recommendations

Course information and credit recommendations are provided in the *Guide* to assist college officials in assessing the applicability of a student's education in a noncollegiate organization to his or her program of study. Actual credits granted will depend on an institution's degree requirements and general policy on granting credit for college-level learning achieved outside that institution, and the student's prior educational background.

Credit for each course may be applied to a student's program of study in various ways: (a) applied to the major to replace a required course, (b) applied as an optional course within the major, (c) applied as a general elective, or (d) applied to waive a prerequisite.

Duplication of Credit

Each course listed in the *Guide* is reviewed on the assumption that a student takes only that course. However, since a student may take several courses which are apparently in the same subject area and at the same academic level, institution officials should carefully review the course objective and instructional description in the *Guide* for each course the student completed and for which credit is requested. If it appears that major topics of instruction are duplicated among the several courses, officials may wish to adjust the credit recommendations in order to avoid granting duplicate credit.

Assistance From Program Staff

Information on the evaluation and credit recommendation system is provided to organizations, colleges, and individual students by the staff of the Program on Noncollegiate Sponsored Instruction.

Publication of *A Guide to Educational Programs in Noncollegiate Organizations* is the primary means of disseminating the results of course evaluations. The *Guide* is sent to several officials in each college in New York State, to colleges in all other states, to the noncollegiate organizations participating in the Program, and to other interested individuals and organizations. Since evaluations are conducted on a regular basis, credit recommendations continue to be established for new courses and organizations. After each evaluation, an organization is sent the official descriptions and credit recommendations for the courses which were evaluated as well as a letter explaining that the courses will appear in the next Supplement to the *Guide*. To keep the colleges informed, new courses are published in the State Education Department's bimonthly newsletter, *PS: Postsecondary Education in New York State*. *PS* is sent to all colleges in the State, interested colleges in other states, and a large number of individuals and noncollegiate organizations. In addition, on request, Program staff will furnish more specific information on the courses listed in the *Guide* and *PS* and offer assistance in the interpretation and use of published results.

It is the Program's general policy to publish in the *Guide* those courses for which credit is recommended. A course might not be included for one of several reasons: (1) it has not been submitted for evaluation, (2) it has been reviewed since publication of the latest supplement to the *Guide*, (3) it has been evaluated and has received a negative credit recommendation, and (4) credit has been recommended, but the sponsoring organization, for its own reasons, has requested that the course not be publicized. Whatever the case, Program staff will respond to individual requests about the status of an organization's courses.

Information on the policies of colleges in New York State regarding the acceptance of the credit recommendations is published in *Granting Credit for Noncollegiate Sponsored Instruction in New York State*. The booklet contains the results of a survey of all colleges in the State to collect information about their policies for using the credit recommendations, specific information about their practices, and the appropriate source of information for students and noncollegiate organizations.

For assistance from Program staff, contact:

Program on Noncollegiate Sponsored Instruction
New York State Education Department
Cultural Education Center, Room 5C85
Empire State Plaza
Albany, NY 12230

Telephone: (518) 474-8592

SECTION I

INTRODUCTION

The course exhibits contained in this section represent all of the courses which were evaluated and given credit recommendations between July 1977 and July 1978, with the exception of training programs conducted by government agencies under the Comprehensive Employment and Training Act (CETA). (The course exhibits for CETA training programs appear in Section II.) For an organization which does not have previously evaluated courses listed in the 1977 *Guide*, there is a brief introduction describing the nature of the organization and its educational activities, in addition to the appropriate course exhibits. Introductions are not included for those organizations which have course exhibits in the 1977 *Guide*; the introductions, which include the source of official student records, for those organizations can be found in that edition of the *Guide*.

AMERICAN INSTITUTE OF BANKING WESTCHESTER COUNTY CHAPTER

The Westchester County Chapter of the American Institute of Banking (AIB) provides academic and professional courses in contemporary areas of banking activities for employees of Westchester County banking institutions. Day and evening instruction is provided.

The courses listed below constitute the Chapter's Basic, Standard, Advanced, and General Certificate programs. These programs combine academic and technical banking curricula frequently not duplicated in collegiate or vocational institutions. The courses are taught in high school and college classrooms throughout Westchester County.

Please note that the credit recommendations listed below apply *only* to courses offered by the Westchester County Chapter of AIB.

Source of official student records: Director of Education, American Institute of Banking, c/o Bank of New York, 60 Mitchell Place, White Plains, New York 10601.

Accounting I

Location: Various area high school and college facilities.

Length: 45 hours (15 weeks).

Dates: June 1968—Present.

Objective: To provide the student with an understanding of the introductory concepts and practices of accounting.

Instruction: Basic financial statements; setting up accounts; trial balance and worksheet; closing the books; cash receipts and disbursements journal; banking procedures; special journals; accounts receivable and payable ledger; depreciation and adjustments; classified statements; payroll. (Prerequisite: Business Mathematics.)

Credit recommendation: In the lower division baccalaureate/associate degree category, 3 semester hours in Accounting (6/78).

Advanced Effective English

Location: Various area high school and college facilities.

Length: 45 hours (15 weeks).

Dates: September 1978—Present.

Objective: To enable the student to gain skill in reading comprehension and expository writing.

Instruction: Techniques of writing essays, formal arguments, research papers, and analyses are emphasized. Readings include essays, short stories, and novels.

Credit recommendation: In the lower division baccalaureate/associate degree category, 3 semester hours in English (5/78).

Analyzing Financial Statements I

Location: Various area high school and college facilities.

Length: 45 hours (15 weeks).

Dates: June 1968—Present.

Objective: To develop the student's knowledge of the analysis procedure used by financial institutions in determining the credit worthiness of a company.

Instruction: The principles and policies involved in the appraisal of credit risk through analysis of accounting statements of financial conditions; analysis of the balance sheet; profit and loss statement; the use of the worksheet in analysis; working capital analysis; accounts receivable analysis; inventory analysis; budget. (Prerequisite: Accounting I.)

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 3 semester hours in Banking or Finance (6/78).

Basic Psychology

Location: Various area high school and college facilities.

Length: 45 hours (15 weeks).

Dates: January 1976—Present.

Objective: To provide the student with an introduction to psychology as a behavioral science.

Instruction: Human development in infancy, childhood, adolescence, and adulthood; learning and perception; motivation. Methods such as case studies, student projects, films, and readings are used to develop a comprehensive and accurate understanding of human behavior.

Credit recommendation: In the lower division baccalaureate/associate degree category, 3 semester hours in Behavioral Science (5/78).

Business Administration (Introduction to Business)

Location: Various area high school and college facilities.

Length: 45 hours (15 weeks).

Dates: May 1968—Present.

Objective: To give the student an overview of business organizations and how they operate in the United States.

Instruction: A general survey of the types and structures of business organizations. Emphasis is placed on the managerial responsibility of coordinating the many facets of a business enterprise. Administration, financial management, production, labor-management relations, marketing, coordination and control, and public relations are stressed.

Credit recommendation: In the lower division baccalaureate/associate degree category, 3 semester hours in Business Administration (5/78).

Business Mathematics (Fundamentals of Business Mathematics)

Location: Various area high school and college facilities.

Length: 45 hours (15 weeks).

Dates: January 1976—Present.

Objective: To provide the student with skills in business arithmetic and accounting terminology and concepts.

Instruction: Basic application of mathematics is examined in order to develop a working knowledge of personal banking records, inventory and turnover, charges for credit, sales activities and records, depreciation, discount and interest, promissory notes, interest variables, and securities transactions.

Credit recommendation: In the lower division baccalaureate/associate degree category, 3 semester hours in Business Administration (5/78).

Business Writing
(Formerly Bank Writing and Communications)

Location: Various area high school and college facilities.

Length: 45 hours (15 weeks).

Dates: January 1976—Present.

Objective: To enable the student to improve his/her writing skills, with specific emphasis given to business writing.

Instruction: To strengthen mastery of writing skills with the overall goal that such skills be used appropriately in preparing concise, well-planned business letters, memoranda, and reports. Regular written exercises are used to develop these skills.

Credit recommendation: In the lower division baccalaureate/associate degree category, 3 semester hours in Business Communications or English (5/78).

Credit Administration (Bank Lending)

Location: Various area high school and college facilities.

Length: 45 hours (15 weeks).

Dates: June 1968—Present.

Objective: To provide the student with an overview and understanding of the bank lending function.

Instruction: Bank policies; commercial banks as extenders of credit; introduction to lending; various types of loans (capital, secured, term, real estate, instalment); other aspects of lending; introduction to credit department administration; credit investigation; analysis of financial statements; workout situations; opportunities and responsibilities of the bank lending officer. (Prerequisite: Accounting I.)

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 3 semester hours in Banking or Finance (6/78).

Effective English

Location: Various area high school and college facilities.

Length: 45 hours (15 weeks).

Dates: May 1968—Present.

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Objective: To enable the student to develop skill in reading comprehension, in the use of grammatical concepts, and in the development of written expression.

Instruction: Fundamental principles underlying effective use of the English language; ways in which communication may be heightened by proper use of the techniques of language; mastery of language through wide reading, an interest in words, and practice in writing. The need to consider the communication and the audience to which it is addressed is stressed.

Credit recommendation: In the lower division baccalaureate/associate degree category, 3 semester hours in English (5/78).

Effective Speaking

Location: Various area high school and college facilities.

Length: 45 hours (15 weeks).

Dates: May 1968—Present.

Objective: To enable the student to develop effective oral communication skills.

Instruction: The acquisition of basic skills and confidence needed to speak effectively; introduction to the behavioral principles underlying effective oral communications; the organization of content; building self-confidence and poise; use of body and voice mechanisms as effective tools of communication.

Credit recommendation: In the lower division baccalaureate/associate degree category, 3 semester hours in Business Communications or English (5/78).

Fundamentals of Bank Data Processing

Location: Various area high school and college facilities.

Length: 45 hours (15 weeks).

Dates: June 1968—Present.

Objective: To provide the student with the basic concepts of electronic data processing with special reference to bank automation.

Instruction: Survey of data processing and computer concepts as applied to banks; data recording, processing, and input and output; computer programming (flow charting and coding). A visit is made to a bank data processing center. (Prerequisite: Business Mathematics.)

Credit recommendation: In the lower division baccalaureate/associate degree category, 3 semester hours in Electronic Data Processing (6/78).

Human Relations Development

Location: Various area high school and college facilities.

Length: 45 hours (15 weeks).

Dates: January 1977—Present.

Objective: To increase the student's self-awareness and facilitate effectiveness in interpersonal communication in an industrial environment.

Instruction: How to be an effective helping agent for others; how to affect the behavior of others; how to resolve conflict of needs; how to explore the ways in which environmental factors affect human communication; transactional analysis.

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 1 semester hour in Applied Behavioral Science (5/78).

Instalment Credit

Location: Various area high school and college facilities.

Length: 45 hours (15 weeks).

Dates: June 1968—Present.

Objective: To provide the student with an introduction to instalment credit and its administration.

Instruction: Techniques of instalment lending (establishing the credit, obtaining and checking information, servicing the loan, collecting amounts due, credit evaluation, and collection policies and procedures); legal aspects; financial statement analysis; credit department management; indirect instalment lending. (Prerequisite: Principles of Bank Operations.)

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 3 semester hours in Banking or Finance (6/78).

International Banking

Location: Various area high school and college facilities.

Length: 45 hours (15 weeks).

Dates: June 1968—Present.

Objective: To present the student with the basic framework and fundamentals of international banking, including the transfer of money, the financing of trade, the role of international agencies, the work of commercial banks, and foreign currency transactions.

Instruction: World of international banking; international activities of United States and foreign banks; correspondent banking relationships; foreign exchange; letters of credit; bankers' acceptances; collections; international lending; Euro-dollar market.

Credit recommendation: In the upper division baccalaureate category, 3 semester hours in Banking or Finance (6/78).

Law and Banking

Location: Various area high school and college facilities.

Length: 45 hours (15 weeks).

Dates: January 1976—Present.

Objective: To provide the student with a knowledge of the basic concepts of business law, with emphasis on the Uniform Commercial Code.

Instruction: Court system and civil procedures; contracts; quasi-contracts; property; torts and crimes; agency; partnerships; corporations; sales of personal property; commercial paper and bank deposits/collections; documents of title; secured transactions.

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 3 semester hours in Business Administration or Business Law (6/78).

Macroeconomics

Location: Various area high school and college facilities.

Length: 45 hours (15 weeks).

Dates: September 1978—Present.

Objective: To provide the student with a knowledge of the theory and practical application of the basic concepts of macroeconomics.

Instruction: Price system; comparative economic systems; supply, demand, and equilibrium; elasticity of demand; circular flow; inflation; unemployment; national income accounting; aggregate supply and demand; the multiplier; fiscal policy; consumption and investment; business cycles; the Federal Reserve System; money creation; the public sector; economic growth.

Credit recommendation: In the lower division baccalaureate/associate degree category, 3 semester hours in Business Administration or Economics (6/78).

Management Psychology

Location: Various area high school and college facilities.

Length: 45 hours (15 weeks).

Dates: September 1973—Present.

Objective: To provide the student with an understanding of the various organizational factors and procedures that determine career growth and progress.

Instruction: Growth and history of the human relations concept; the supervisor's job; leadership and its effect on employees; motivation and job advancement; training new employees; self-development and development of others; problem solving.

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 2 semester hours in Behavioral Science or Business Administration (5/78).

Marketing for Bankers

Location: Various area high school and college facilities.

Length: 45 hours (15 weeks).

Dates: September 1976—Present.

Objective: To provide the student with an understanding and appreciation of the marketing function in banking.

Instruction: Marketing concept; the market and market segmentation; market research; consumer motivation and behavior; consumerism; controlling marketing efforts; product; price; distribution; advertising; promotion; presentations. (Prerequisites: Macroeconomics and Principles of Bank Operations.)

Credit recommendation: In the lower division baccalaureate/associate degree category, 3 semester hours in Business Administration or Marketing (6/78).

Money and Banking

Location: Various area high school and college facilities.

Length: 45 hours (15 weeks).

Dates: June 1968—Present.

Objective: To give the student a broad understanding of the function of the American financial system and the role of money and credit within the total economic system.

Instruction: Structure of the commercial banking system and other financial institutions; banks and the money supply; bank investments and loans; the Federal Reserve System; international monetary systems. (Prerequisite: Macroeconomics.)

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 3 semester hours in Business Administration, Finance, or Money and Banking (6/78).

Negotiable Instruments

Location: Various area high school and college facilities.

Length: 45 hours (15 weeks).

Dates: June 1968—Present.

Objective: To provide the student with an overview of the legal aspects of negotiable instruments used in bank deposits, collection operations, and payments.

Instruction: Characteristics of negotiable instruments; holder in due course; contractual responsibilities and liabilities of the parties to a negotiable instrument; warranties; bank deposits; collections. (Prerequisite: Law and Banking.)

Credit recommendation: In the upper division baccalaureate category, 3 semester hours in Business Administration or Business Law (6/78).

Principles of Auditing

Location: Various area high school and college facilities.

Length: 45 hours (15 weeks).

Dates: September 1972—Present.

Objective: To provide the student with an understanding of good audit practices in effective bank management.

Instruction: Audit principles, techniques, and procedures; internal control; auditing in small banks; audits by directors; customer confirmation; trust department auditing; auditing EDP systems. (Prerequisite: Principles of Bank Operations.)

Credit recommendation: In the upper division baccalaureate category, 3 semester hours in Accounting (6/78).

Principles of Bank Operations

Location: Various area high school and college facilities.

Length: 45 hours (15 weeks).

Dates: June 1968—Present.

Objective: To provide the student with an understanding of the fundamentals of bank functions.

Instruction: Commercial banks and the monetary system; negotiable instruments; the commercial bank and its depositors; the deposit function; the payment function; loans and investments; management of bank funds; savings accounts and other time deposits; commercial bank loans; safe deposit; specialized services; bank accounting; marketing of bank services; evolution of American banking; external regulation; internal controls; banking and public services.

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 3 semester hours in Banking or Business Administration (6/78).

Principles of Savings Bank Operations

Location: Various area high school and college facilities.

Length: 45 hours (15 weeks).

Dates: June 1968—Present.

Objective: To provide the student with a knowledge of the operations, structure, and role of savings banks in the United States economy.

Instruction: Personal savings institutions; deposits; the payments function; check processing; real estate mortgage loans; consumer loans; life insurance; marketing; powers and organization; supervision.

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 3 semester hours in Banking or Business Administration (6/78).

Real Estate Finance I

Location: Various area high school and college facilities.

Length: 45 hours (15 weeks).

Dates: September 1977—Present.

Objective: To provide the student with an understanding of the financing of real estate.

Instruction: Channeling of funds into the mortgage markets; financing of residential and special-purpose property; administrative tasks common to most mortgage departments.

Credit recommendation: In the upper division baccalaureate category, 3 semester hours in Business Administration or Finance (6/78).

Savings Bank Life Insurance I

Location: Various area high school and college facilities.

Length: 45 hours (15 weeks).

Dates: January 1978—Present.

Objective: To prepare students for the New York State examination in savings bank life insurance.

Instruction: Insurance and its uses; basic life insurance policies; premiums, dividends, and nonforfeiture values; additional policy provisions; settlement options and annuities; double indemnity and waiver of premium benefits; legal phases of life insurance; New York Savings Bank Life Insurance; selected provisions of New York Insurance Law.

Credit recommendation: In the lower division baccalaureate/associate degree category, 1 semester hour in Insurance (6/78).

Supervision and Personnel Administration

Location: Various area high school and college facilities.

Length: 45 hours (15 weeks).

Dates: May 1968—Present.

Objective: To enable the student to understand the functions of a personnel department and the personnel-related responsibilities of management.

Instruction: Organization of work and jobs; organization of personnel; program for personnel management; personnel recruitment; selection; employee development; performance evaluation; motivation and job satisfaction; communication; leadership and supervision; administering change; unions and personnel management; wage and salary administration; employee benefits and security.

Credit recommendation: In the upper division baccalaureate category, 3 semester hours in Business Administration (5/78).

Techniques for Modern Management

Location: Various area high school and college facilities.

Length: 45 hours (15 weeks).

Dates: September 1976—Present.

Objective: To assist the student in developing skills and techniques necessary for effective management.

Instruction: A study of the applied behavioral sciences, organization theory, and current writings on management style and technique. Detailed analysis and discussion are given to the development of practical applications of management techniques in the bank environment, with special focus on contemporary issues that managers face in day-to-day situations.

Credit recommendation: In the lower division baccalaureate/associate degree category, 3 semester hours in Business Administration (5/78).

Trust Functions and Services

Location: Various area high school and college facilities.

Length: 45 hours (15 weeks).

Dates: June 1968—Present.

Objective: To provide the student with knowledge of the services rendered by institutions engaged in trust business.

Instruction: Trust powers and government supervision; trust department services; property and property rights; wills; settlement of estates; personal and insurance trusts and their management; essential features of personal trust instruments; personal agencies; guardianships; employee benefit trusts; corporate trusts and their management; corporate agencies.

Credit recommendation: In the upper division baccalaureate category, 3 semester hours in Banking, Business Administration, or Business Law (6/78).

AMERICAN TELEPHONE AND TELEGRAPH COMPANY

LONG LINES

AT&T Long Lines is a department of the American Telephone and Telegraph Company. It provides the interconnecting communication links between the Bell System associated companies and independent telephone companies nationwide. It consists of seven geographic areas, with New York State included in both the New York City area and the Northeastern area.

Long Lines offers courses to both its management and nonmanagement employees. These courses range from instruction in very technical engineering disciplines and marketing techniques to more general programs directed at the development of communication skills, managerial effectiveness, and self-awareness. These courses are offered on company time and employees are released from their normal responsibilites to attend.

MANAGEMENT RESOURCE CENTER—NEW YORK CITY

Source of official student records: Director of Training, Management Resource Center, Room 2300, AT&T Long Lines, 32 Avenue of the Americas, New York, New York 10013.

Advanced Human Potential Seminar

Location: Management Resource Center, 32 Avenue of the Americas, New York, NY.

Length: 24 hours (3 days).

Dates: August 1977—Present.

Objective: To enable the participant to identify and manage conflict.

Instruction: The course deals in more depth with the topics included in the Basic Human Potential Seminar and introduces the following areas: coping productively with failure, identification of conflict, conflict management and resolution, preventing conflict, life planning, and career planning. The course consists of lectures, films, and small group discussions. The course was organized by, and training for instructors is provided by, the National Center for Human Potential. (Prerequisite: Basic Human Potential Seminar must be completed a minimum of six months prior to enrolling in this course.)

Credit recommendation: In the lower division baccalaureate/associate degree category, 2 semester hours in Behavioral Aspects of Management or Psychology (8/77).

Basic Human Potential Seminar

Location: Management Resource Center, 32 Avenue of the Americas, New York, NY.

Length: 24 hours (3 days).

Dates: February 1977—Present.

Objective: To enable the participant to increase his/her self-confidence and motivation and to set and achieve personal goals.

Instruction: Motivations and values; analysis of past accomplishments; long- and short-range goal setting; barriers to success; strengths and satisfactions. The course consists of lectures, films, and small group discussions. The course was organized by, and training for instructors is provided by, the National Center for Human Potential.

Credit recommendation: In the lower division baccalaureate/associate degree category, 2 semester hours in Behavioral Aspects of Management or Psychology (8/77).

Effective Reading Seminar

Location: Management Resource Center, 32 Avenue of the Americas, New York, NY.

Length: 15 hours (5 days).

Dates: July 1977—Present.

Objective: To increase the participants' reading effectiveness by doubling reading speed and improving comprehension.

Instruction: The course teaches strategies for effective reading by identifying the participants' reading problems and by enabling them to understand the importance of using different approaches when reading different types of materials. Tests are administered to check progress in speed and comprehension.

Credit recommendation: In the lower division baccalaureate/associate degree category, 1 semester hour in Effective Reading (8/77).

Effective Writing Styles

Location: Management Resource Center, 32 Avenue of the Americas, New York, NY.

Length: 37½ hours (5 days).

Dates: October 1977—Present.

Objective: To enable the participant to write effectively through the use of proper writing skills.

Instruction: Review of English grammar; organization of ideas; proper spelling; memo writing; letter writing; written proposals and recommendations. Approximately half of the course is devoted to writing exercises.

Credit recommendation: In the lower division baccalaureate/associate degree category, 2 semester hours in Communications (8/77).

Labor Relations (H115)

Location: Management Resource Center, 32 Avenue of the Americas, New York, NY.

Length: 18 hours (2½ days).

Dates: January 1977—Present.

Objective: To provide the participant with basic knowledge and skills in labor relations.

Instruction: Students become thoroughly familiar with the company's contract with the union, its basic provisions, and the collective bargaining process. Management rights; grievance process and how to conduct a grievance meeting; attendance problems; job classification; promotion; work performance problems; misconduct; work stoppages; arbitration.

Credit recommendation: In the lower division baccalaureate/associate degree category, 1 semester hour in Labor Relations or Personnel Administration (8/77).

New Supervisory Training (H105)

Location: Management Resource Center, 32 Avenue of the Americas, New York, NY.

Length: 37½ hours (5 days).

Dates: January 1977—Present.

Objective: To improve the effectiveness of the new first-level manager.

Instruction: Overview of the organization and the functions of the various departments within the company; decisionmaking and problem solving; conflict and resolution; personal growth and awareness. The course includes lectures, discussions, films, and problem-solving and team-building exercises.

Credit recommendation: In the lower division baccalaureate/associate degree category, 2 semester hours in Management (8/77). NOTE: This course is a revised version of New Supervisory Training (M105) which was evaluated in February 1976.

Workshop in Problem Solving

Location: Management Resource Center, 32 Avenue of the Americas, New York, NY.

Length: 37½ hours (5 days).

Dates: July 1977—Present.

Objective: To enable the participant to develop and analyze decisionmaking and problem-solving skills.

Instruction: Distinction between decisionmaking and problem solving; approaches to problem solving (logical, creative, group, and individual); consulting and oral presentations. In addition to many problem-solving activities, the course includes an in-basket exercise and a consulting case which allows participants to make recommendations concerning the problems within a given organization.

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 3 semester hours in Management (8/77).

HUMAN RESOURCE CENTER—WHITE PLAINS

Source of official student records: Training Administrator, Human Resource Center, Room 1100C, AT&T Long Lines, 440 Hamilton Avenue, White Plains, New York 10601.

Communications Workshop (H101)

Location: Human Resource Center, 440 Hamilton Avenue, White Plains, NY.

Length: **Version 1 (Management Personnel):** 35 hours (1 week).
Version 2 (Nonmanagement Personnel): 28 hours (1 week).

Dates: June 1973—Present.

Objective: To enable the student to develop effective communications skills.

Instruction: Methods of effective communication; understanding and resolving communications barriers; importance of listening, and utilizing feedback. The course includes lecturettes, body language games, problem-solving activities, skill-building games in listening, perceptual awareness activities, simulations, and other structured activities.

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 2 semester hours in Individual Behavior in Small Groups (2/78).

Labor Relations (H115)

Location: Human Resource Center, 440 Hamilton Avenue, White Plains, NY.

Length: 20 hours (2½ days).

Dates: January 1977—Present.

Objective: To provide the participant with basic knowledge and skills in labor relations.

Instruction: Students become thoroughly familiar with the company's contract with the union, its basic provisions, and the collective bargaining process. Management rights; grievance process and how to conduct a grievance meeting; attendance problems; job classification; promotion; work performance problems; misconduct; work stoppages; arbitration.

Credit recommendation: In the lower division baccalaureate/associate degree category, 1 semester hour in Labor Relations or Personnel Administration (2/78).

Managing Managers (H210)

Location: Human Resource Center, 440 Hamilton Avenue, White Plains, NY.

Length: 32 hours (4 days).

Dates: September 1974—Present.

Objective: To assist second-level managers in developing key managerial skills required to perform their job functions effectively.

Instruction: The role of a second-level manager; delegation of responsibility; management appraisal plan; leadership styles; problem solving and decisionmaking; time management; objective setting (management by objective); motivation; subordinate development. Lecture/discussions and various roleplay activities are used to develop skills.

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 3 semester hours in Behavioral Science or Management (2/78).

Managing at the First Level (H136)

Refer to New Supervisory Training (M105).

New Supervisory Training (H105)

Location: Human Resource Center, 440 Hamilton Avenue, White Plains, NY.

Length: 37½ hours (5 days).

Dates: January 1978—Present.

Objective: To improve the effectiveness of the new first-level manager.

Instruction: Overview of the organization and the functions of the various departments within the company; decisionmaking and problem solving; conflict and resolution; personal growth and awareness. The course includes lectures, discussions, films, and problem-solving and team-building exercises.

Credit recommendation: In the lower division baccalaureate/associate degree category, 2 semester hours in Management (2/78). NOTE: This course is a revised version of New Supervisory Training (M105).

1. New Supervisory Training (M105)
2. Managing at the First Level (H136)

Location: Human Resource Center, 440 Hamilton Avenue, White Plains, NY.

Length: 1. 72 hours (2 weeks).
2. 24½ hours (4 days).

Dates: 1. January 1975—December 1976.
2. January 1975—Present.

Objective: To improve the effectiveness of new first-level managers through increased knowledge of management practices and to orient them to company practices.

Instruction: Course 1: Fundamentals and applications of management practices (salary administration, labor relations, absence control, personnel practices and appraisal); overview of the organization and functions of the various departments within the company. Approximately one-third of the course is devoted to labor-management relations. Course format consists of lectures, discussions, films and role plays. **Course 2:** Fundamentals of supervision and management practices. Management by objectives; time management; problem solving; motivation (Maslow, Herzberg, work itself/job enrichment); leadership styles (McGregor's Theory X-Theory Y, Blake's managerial grid); appraisal feedback; subordinate development. The course consists of lectures, discussions, individual tasks, and group exercises.

Credit recommendation: In the lower division baccalaureate/associate degree category, 3 semester hours in Basic Management (2/78). NOTE: Courses 1 and 2 must both be completed to receive full credit.

BIOLOGICAL PHOTOGRAPHIC ASSOCIATION, INC.

The Biological Photographic Association, Inc. is an international organization of over 1,200 scientific photographers whose purpose is to further the study and application of photography in relation to biological sciences, to promote higher standards in methods and research, and to serve its members in advancing their professional competence. The Association sponsors and maintains a certification program to set and determine educational, ethical, and specialization standards for practitioners in the field of biological photography. It implements this program through a Board of Registry which issues certification to any candidate found qualified.

The certification program involves self- and group-study in biological photography with built-in systems of feedback from regional and board advisors. A comprehensive three-phase examination measures an applicant's theoretical knowledge, practical skills, and professionalism. The program certifies performance and potential over the broad scope of categories representative of bio-photographic activity.

Source of official student records: Executive Director, Biological Photographic Association, Inc., 6650 Northwest Highway, Chicago, Illinois 60631.

Certification Program for Registered Biological Photographers

Location: Independent study.

Length: Independent study.

Dates: June 1968—Present.

Objective: To measure and certify knowledge, skills, and performance in biological photography.

Instruction: Students must pass a four-hour written examination designed to test basic and specialized theoretical knowledge of the following topics: light theory; photographic optics and chemistry; appropriate camera and light techniques; photomicrography; cinematography; videography; and planning and production. A portfolio of satisfactory assignments must then be submitted in these required topics: photomicrography; photomacrography; preparation of a journal or oral paper; preproduction planning; production in a motion media; photography of glassware, various specimens, and cultures; graphic illustrative techniques; infrared and ultraviolet techniques; portraiture; various copy techniques; and sequential photography. Twelve or more elective assignments are also submitted so that the candidate may work in his/her speciality, such as television, cinematography, or ophthalmology. The final step in the certification process is an oral examination at which the student gives a presentation on his/her particular specialization, photographic research, theory, or administration, and is questioned on his/her written and practical examinations. (Prerequisite: A student must have at least five years of varied biophotographic education, training, or experience before completion of the program and certification.)

Credit recommendation: In the lower division baccalaureate/associate degree category, 40 semester hours in Biological Photography (6/78). NOTE: It is recommended that a college ask a student to submit his/her portfolio for review at the time it is considering granting credit for successful completion of the certification program.

BLUE CROSS/BLUE SHIELD OF GREATER NEW YORK

Blue Cross/Blue Shield of Greater New York is a nonprofit health service corporation serving the health needs of nearly nine million subscribers in the 17-county New York City metropolitan area.

The Data Processing Education Department provides technical training in programming, systems analysis, and other data processing-related skills to members of the corporation's large data processing facility. The Department is staffed by an administrator, two full-time instructors and a librarian. Courses are conducted during normal working hours at the corporate headquarters in New York City.

Source of official student records: Manager of Technical Support, Blue Cross/Blue Shield of Greater New York, 622 Third Avenue, New York, New York 10017.

BAL (DP04)

Location: 622 Third Avenue, New York, NY.

Length: 150 hours (5 weeks).

Dates: January 1977—Present.

Objective: To provide the knowledge and skills necessary to become BAL programmers, and an introduction to systems programming.

Instruction: Introduction to BAL; Advanced BAL Programming, including floating-point and decimal arithmetic and macros. Student completes five machine problems. (Prerequisite: Introduction to Data Processing, and programming experience.)

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 6 semester hours in Electronic Data Processing; or in the graduate degree category, 3 semester hours in Electronic Data Processing (8/77).

COBOL Programming (DP01)

Location: 622 Third Avenue, New York, NY.

Length: 180 hours (6 weeks).

Dates: January 1977—Present.

Objective: To provide the knowledge and skills necessary to become COBOL programmers, from elementary COBOL programming to file maintenance and update procedures.

Instruction: Simple ANSI COBOL programming; sequential, ISAM, and direct file processing; debugging; table handling; SORT and string statements. Coverage of TOTAL and PANVALET. Students write, compile, and execute five programs. (Prerequisite: Introduction to Data Processing, or the equivalent.)

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 6 semester hours in Electronic Data Processing; or in the graduate degree category, 3 semester hours in Electronic Data Processing (8/77).

OS JCL and Utilities (DP02)

Location: 622 Third Avenue, New York, NY.

Length: 60 hours (2 weeks).

Dates: January 1977—Present.

Objective: To provide the student with the ability to communicate with the Operating System via Job Control Language and commonly used IBM utilities.

Instruction: The seven JCL statements; cataloged procedures; IEFBR14; IEBGENER; IEHPROGM; IEHLIST; IEBPTPCH; IEBUPTE; IEHMOVE. Student must complete four JCL problems. (Prerequisite: Introduction to Data Processing, or equivalent.)

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 3 semester hours in Electronic Data Processing (8/77).

OS/VS Dumps and Debugging (DP03)

Location: 622 Third Avenue, New York, NY.

Length: 30 hours (1 week).

Dates: January 1977—Present.

Objective: To provide the student with the knowledge needed to understand dumps and the skill necessary to debug most abends.

Instruction: Storage dump concepts; types of storage dumps, including SOCI-7 Abends; storage dump format; internal and external abends; debugging procedures, including BAL debugging. (Prerequisite: Introduction to Data Processing and OS JCL Utilities, or equivalent.)

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 2 semester hours in Electronic Data Processing (8/77).

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.

Power Supply Training Center

The Power Supply Training Center provides education and training programs for the major divisions of the Company's Power Supply Department: Power Generation Operations, Power Generation Maintenance, and Central Substations. It is responsible for qualifying employees in the areas of steam, electricity, and maintenance of power plant mechanical equipment.

Source of official student records: Director, Power Supply Training Center, Consolidated Edison, Inc., 506 East 75th Street, New York, New York 10021.

Advanced Power Plant Operator (PS-003)

Location: Power Supply Training Center, 506 East 75th Street, New York, NY; other company locations.

Length: 80 hours (2 weeks).

Dates: January 1970—Present.

Objective: To provide instruction at the advanced level in the theory and practice of the operation of power plants, with an emphasis on the thermodynamics of power plant equipment.

Instruction: Energy and its units; physical measurements; theory and practice of lubrication; flue gas analysis and interpretation; pump operation and trouble diagnosis; heat transfer. (Prerequisite: Intermediate Power Plant Operator PS-002 or equivalent experience.)

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 3 semester hours in Marine/Mechanical Engineering or Marine/Mechanical Technology (9/77).

Basic Electrical and Mechanical Blueprint Reading

Location: Power Supply Training Center, 506 East 75th Street, New York, NY; other company locations.

Length: 40 hours (1 week).

Dates: November 1975—Present.

Objective: To provide an overview of blueprint reading as it relates to the occupational requirements in electrical construction.

Instruction: Electrical and mechanical symbols; basic electrical circuits; logic circuits; one-line diagrams.

Credit recommendation: In the lower division baccalaureate/associate degree category, 1 semester hour in Construction Technology or Electrical Construction Maintenance (9/77).

Basic Power Plant Operator (PS-001)

Location: Power Supply Training Center, 506 East 75th Street, New York, NY; other company locations.

Length: 40 hours (1 week).

Dates: January 1970—Present.

Objective: To provide an introduction to steam power generation.

Instruction: History of power generation; power plant equipment; boilers; fuel; water and steam cycles; auliliaries; turbines; condensers; generators; basic elements of combustion; electricity; safety practices.

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 1 semester hour in Marine/Mechanical Engineering or Marine/Mechanical Technology (9/77).

Basic Regulator and Control (PS-058)

Location: Power Supply Training Center, 506 East 75th Street, New York, NY; other company locations.

Length: 40 hours (1 week).

Dates: June 1975—Present.

Objective: To provide an overview of the fundamental techniques of instrumentation.

Instruction: Temperature, pressure, and flow instrumentation, and their application in controls.

Credit recommendation: In the lower division baccalaureate/associate degree category, 1 semester hour in Basic Industrial Instrumentation (9/77).

Control Room Procedures (PS-004B)

Location: Power Supply Training Center, 506 East 75th Street, New York, NY; other company locations.

Length: 80 hours (2 weeks).

Dates: September 1967—Present.

Objective: To provide an understanding of the techniques necessary for the efficient and reliable operation of control rooms for boilers, turbines, auxiliaries, and generators.

Instruction: Boiler, turbine, and auxiliary equipment operation; generator operation.

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 2 semester hours in Marine/Mechanical Engineering or Marine/Mechanical Technology (laboratory) (9/77).

1. Electrical Fundamentals (PS-046)
2. Intermediate Electrical (PS-047)
3. Motor and Motor Controls (PS-047-1)

Location: Power Supply Training Center, 506 East 75th Street, New York, NY; other company locations.

Length: 1. 80 hours (2 weeks).
2. 120 hours (3 weeks).
3. 40 hours (1 week).

Dates: 1. September 1967—Present.
2. September 1967—Present.
3. January 1975—Present.

Objective: To provide a basic knowledge of electrical theory as it applies to the electrical maintenance field.

Instruction: AC and DC circuits; motors; generators; controls; troubleshooting.

Credit recommendation: In the lower division baccalaureate/associate degree category, 7 semester hours in Electrical Construction Maintenance (5 lecture, 2 laboratory) (9/77). NOTE: Courses 1, 2, and 3 must all be completed to receive credit.

1. Instrument and Control Basic Course (PS-052)
2. Instrument and Control Intermediate Course (PS-053)

Location: Power Supply Training Center, 506 East 75th Street, New York, NY; other company locations.

Length: 1. 80 hours (2 weeks).
2. 80 hours (2 weeks).

Dates: 1. March 1974—Present.
2. April 1974—Present.

Objective: To provide an understanding of the principles and practices of industrial instrumentation and control.

Instruction: Pressure, temperature, and flow instrumentation; theory of current and potential transformers; voltage, current, power, and resistance measurements; protective and operational relays.

Credit recommendation: In the lower division baccalaureate/associate degree category, 4 semester hours in Electromechanical or Mechanical Technology (3 lecture, 1 laboratory) (9/77). NOTE: Courses 1 and 2 must both be completed to receive credit.

Instrument and Control Intermediate Course (PS-053)

Refer to Instrument and Control Basic Course (PS-052).

Intermediate Electrical (PS-047)

Refer to Electrical Fundamentals (PS-046).

Intermediate Power Plant Operator (PS-002)

Location: Power Supply Training Center, 506 East 75th Street, New York, NY; other company locations.

Length: 80 hours (2 weeks).

Dates: January 1970—Present.

Objective: To provide instruction at the intermediate level in the theoretical and practical methods used in the operation of power plant equipment.

Instruction: Boiler construction; theory and practice of boiler combustion; theory, principles, and operation of steam turbines; condenser operation; properties of steam; types of test instruments; heat transfer; water treatment.

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 3 semester hours in Marine/Mechanical Engineering or Marine/Mechanical Technology (9/77).

Job Instruction Training (PS-067-1)

Location: Power Supply Training Center, 506 East 75th Street, New York, NY; other company locations.

Length: 40 hours (1 week).

Dates: June 1975—Present.

Objective: To provide the skills and techniques needed to give proper job instruction and to relate effectively to employees.

Instruction: Communications; public speaking; effective listening; characteristics of a good supervisor; human relations.

Credit recommendation: In the lower division baccalaureate/associate degree category, 1 semester hour in Industrial Supervision (9/77).

Motor and Motor Controls (PS-047-1)

Refer to Electrical Fundamentals (PS-046).

Package Boilers (PS-015B)

Location: Power Supply Training Center, 506 East 75th Street, New York, NY; other company locations.

Length: 80 hours (2 weeks).

Dates: January 1973—Present.

Objective: To provide an understanding of the construction and operation of package boilers.

Instruction: Package boiler construction and capabilities; properties of steam, heat transfer, and water treatment; operation of package boiler simulator; malfunctioning and troubleshooting pertaining to package boilers.

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 1 semester hour in Marine/Mechanical Engineering or Marine/Mechanical Technology (9/77).

Signature Analysis

Location: Power Supply Training Center, 506 East 75th Street, New York, NY; other company locations.

Length: 40 hours (5 weeks); additional 60 hours study working on a project.

Dates: May 1977—Present.

Objective: To provide the student with the knowledge and techniques needed to conduct spectrum analysis and evaluation of rotating machinery.

Instruction: Philosophy of signature analysis; vibration theory; harmonic analysis; spectrum analysis theory; theory of transducers; theory of spectrum analyzers; correct test procedure and report preparation; introduction to turbo-machinery blade vibration; introduction to acoustic emission. Final project and report required.

Credit recommendation: In the upper division baccalaureate category or in the graduate degree category, 3 semester hours in Mechanical Engineering (9/77).

SPECIALIZED TRAINING

Specialized Training, a section of Personnel Administration of Consolidated Edison, has been in existence since 1968. It was originally established for the purpose of training new employees for a variety of entry-level positions through government-sponsored programs for the unemployed and underemployed.

Since that time, Specialized Training has also become involved in training for entry-level positions for several New York City corporations. A wide variety of evening courses and seminars are also provided, including Adult Basic Education, High School Equivalency, English and Spanish as Second Languages, Pre-Retirement Counseling, and college courses leading to associate's and bachelor's degrees.

Source of official student records: Training Administrator of Specialized Training, Consolidated Edison, Inc., 708 First Avenue, 8th Floor West, New York, New York 10017.

Basics in Business Mathematics (ST 1.501)

Location: Specialized Training Center, 708 First Avenue, New York, NY.

Length: 65 hours (13 weeks).

Dates: May 1976—January 1978.

Objective: To enable students to develop the fundamental mathematical principles and procedures required for a basic understanding of business mathematics.

Instruction: Concepts and operations applicable to whole numbers, fractions, decimals, and percentages, and the practical application of these principles to the business setting: valuing inventory; computing simple interest; preparing payrolls; computing percentages; computing base and rate; and selling at retail.

Credit recommendation: In the lower division baccalaureate/associate degree category, 2 semester hours in Accounting, Business Administration, Retail Business Management, or Secretarial Science (2/78).

Basic Typing (ST 1.101)

Location: Specialized Training Center, 708 First Avenue, New York, NY.

Length: 100-130 hours (13 weeks); individualized instruction.

Dates: June 1974—December 1977.

Objective: To provide the student with a basic knowledge of the typewriter and proper typing technique; to introduce the student to production typing.

Instruction: Mastery of the keyboard with a minimum attainment level of 35-40 words per minute on a five-minute timing with an error limitation of one error per minute; introduction to the typing of business letters, tabulations, manuscripts, memoranda, and envelopes; setting up business letters in different styles; acquisition of concomitant skills such as proofreading, proper techniques for making corrections, and dexterity in handling carbons. (Prerequisite: ability to type 15 words per minute.)

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 2 semester hours in Secretarial Science (2/78).

Business Mathematics (ST 1.511)

Location: Specialized Training Center, 708 First Avenue, New York, NY.

Length: 150 hours (30 weeks).

Dates: February 1978—Present.

Objective: To provide the student with an understanding of mathematical principles and procedures and their application to the business setting.

Instruction: Review of basic operations; decimals and percents; computing interest, commission and mark-up; payroll invoices and inventory; International System of Units Conversion; reconciling bank statements; taking trade and cash discounts; installment plan purchases; depreciation; detailing the most efficient method for setting up business and consumer mathematical problems for solution on the electronic calculator.

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 3 semester hours in Accounting, Business Administration, Business Education, Retail Business Management, or Secretarial Science (2/78).

Communication Arts for Business (ST 1.611)

Location: Specialized Training Center, 708 First Avenue, New York, NY.

Length: 150 hours (30 weeks).

Dates: February 1978—Present.

Objective: To provide the student with a comprehensive knowledge of the language skills and communication procedures used in contemporary business settings.

Instruction: Introduction to business writing with emphasis placed on grammar and language skills, vocabulary enrichment, spelling reinforcement, composition of business letters, memoranda, reports, news releases, and telecommunications. Students will also be introduced to the preparation of resumes, the formulation of oral communications skills, and the development of critical judgments through literary writings dealing with the business world.

Credit recommendation: In the lower division baccalaureate/associate degree category, 3 semester hours in Business Administration, Business Communications, English, or Secretarial Science (2/78).

Fundamentals of Accounting (ST 1.411)

Location: Specialized Training Center, 708 First Avenue, New York, NY.

Length: 150 hours (30 weeks).

Dates: February 1978—Present.

Objective: To provide the student with an understanding of the accounting cycle from the recording and analyzing procedures through the summarizing procedures and the preparation of general purpose financial statements.

Instruction: Recording daily transactions in general journals and cash journals; preparation of trial balances; determining the significance of information found in financial statements, including balance sheets, income statements, and capital statements; payroll deductions; employers' taxes; individual tax returns; special journals and ledger accounts; sales tax; bad debts; depreciation; fixed assets; disposing of fixed assets; notes and interests; accrued income; expenses; business organizations, including sole proprietorships, partnerships, and corporations.

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 4 semester hours in Accounting, Business Administration, Business Education, or Secretarial Science (2/78).

Office Procedures (ST 1.311)

Location: Specialized Training Center, 708 First Avenue, New York, NY.

Length: 150 hours (30 weeks).

Dates: February 1978—Present.

Objective: To give students a knowledge of office procedures and the work done in an office through the use of simulated situations which will test the students' judgment and initiative, as well as their ability to make decisions and organize and plan work to meet specific deadlines.

Instruction: General office procedures, including filing, telephone techniques, reception and messenger work, organizing the work station, handling incoming and outgoing mail, using voice-writing equipment, recordkeeping, and making travel and meeting arrangements; development of desirable personal and professional qualities that will enable the beginning employee to work harmoniously with her/his immediate supervisor and coworkers; development of an understanding, appreciation, and positive attitude toward the importance of the office and the work done in it; training to enable students to handle executive responsibilities such as researching and assembling facts for reports, writing minutes of meetings, and determining priorities.

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 3 semester hours in Business Administration, Business Education, or Secretarial Science (2/78).

Stenography I (ST 1.211)

Location: Specialized Training Center, 708 First Avenue, New York, NY.

Length: 75 hours (15 weeks).

Dates: February 1978—Present.

Objective: To provide the student with an understanding of Gregg Diamond Jubilee Shorthand in order to develop skill in taking dictation of business letters and transcribing them.

Instruction: The course is designed for individuals who have had no previous instruction in shorthand. At the end of the course, students must be able to write unpracticed, unpreviewed shorthand at the minimum rate of 60 words per minute for three minutes and to transcribe this dictation with 95 percent accuracy within 30 minutes. Emphasis is placed on dictation for speed building, the use of reference sources in transcription to eliminate non-shorthand errors, and the understanding of business vocabulary through application in business correspondence.

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 3 semester hours in Secretarial Science (2/78).

Stenography II (ST 1.212)

Location: Specialized Training Center, 708 First Avenue, New York, NY.

Length: 75 hours (15 weeks).

Dates: February 1978—Present.

Objective: To increase the student's stenographic speed on sustained dictation and to develop skill in transcription.

Instruction: Construction of outlines for unfamiliar words under the stress of timed dictation; proper use of the basic elements of transcription, which include spelling, punctuation, word usage, and typing style; taking simple office-style dictation, which includes short deletions, short insertions and changes, restorations, and short transpositions. At the end of the course, students must be able to write new-matter dictation at the minimum sustained speed of 80 words per minute for three minutes and to transcribe this material with 95 percent accuracy within 30 minutes.

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 3 semester hours in Secretarial Science (2/78).

Stenoscript ABC Shorthand (ST 1.201)

Location: Specialized Training Center, 708 First Avenue, New York, NY.

Length: 1. 65 hours (13 weeks).
2. 66 hours (22 weeks).

Dates: May 1976—Present.

Objective: To enable the student to take and transcribe dictation of typical office correspondence.

Instruction: Study of Stenoscript ABC Shorthand, enabling the student to take down an unpracticed, 160-word (two-minute) letter, containing frequently used business terms, dictated to her/him at 80 words per minute; reading such a letter back; supplying punctuation; transcribing the letter, using an appropriate format and correct spelling, with a rate of error not to exceed 5 percent.

Credit recommendation: In the lower division baccalaureate/associate degree category, 1 semester hour in Business Administration (2/78).

Typing I (ST 1.111)

Location: Specialized Training Center, 708 First Avenue, New York, NY.

Length: 150 hours (15 weeks).

Dates: February 1978—Present.

Objective: To enable the student to master the keyboard; to introduce the student to production typing.

Instruction: Mastery of the keyboard with a minimum attainment level of 35-40 words per minute on a five-minute timing with an error limitation of one error per minute; introduction to the typing of business letters, tabulations, manuscripts, memoranda, and envelopes; setting up business letters in different styles; acquisition of concomitant skills such as proofreading, proper techniques for making corrections, and dexterity in handling carbons; the development of habits of neatness, self-reliance, cooperation, dependability, industry, and promptness.

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 2 semester hours in Secretarial Science (2/78).

Typing II (ST 1.112)

Location: Specialized Training Center, 708 First Avenue, New York, NY.

Length: 150 hours (15 weeks).

Dates: February 1978—Present.

Objective: To develop high levels of skill in keyboard mastery; to prepare the student adequately for a career as a typist.

Instruction: Setting up of advanced business forms, letters, memoranda, tabulations, and envelopes; use of office simulations to provide practice in determining typing priorities; refinement of proofreading skills to include detection of typing errors; timings on production work to achieve a speed of 45-55 words per minute on a five-minute timing with an error limitation of one error per minute.

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 2 semester hours in Secretarial Science (2/78).

DISTRICT COUNCIL 37
AMERICAN FEDERATION OF STATE, COUNTY AND MUNICIPAL EMPLOYEES, AFL-CIO

District Council 37 is the New York City affiliate of the American Federation of State, County and Municipal Employees, AFL-CIO. The Union, largest of the civil service unions in New York, represents 120,000 employees of the City and related agencies. Its membership includes the 25,000 clerks who staff all city agencies, park and highway maintenance workers, librarians, zoo keepers, social service workers, and a wide range of other positions.

The Union's Education Department not only engages in traditional trade union education and leadership training, but through its education fund operates a large and varied program of education and training and career development. The fund, which was established in 1971, is operated by an independent Board of Trustees which employs staff and directs the programs according to the terms of a trust agreement established by the Union and the City's Department of Personnel. The job titles covered by the education fund tend to be entry level and/or low skilled with low wages.

Source of official student records: Administrator, Education Fund, District Council 37, AFSCME-AFL-CIO, 140 Park Place, New York, New York 10007.

Communication Within the Helping Role (IM-4)

Location: 140 Park Place, New York, NY.

Length: 45 hours (15 weeks).

Dates: January 1978—Present.

Objective: To provide students with basic training in communication skills.

Instruction: Styles, types, and problems of communication in the helping role; verbal and nonverbal communication; the helping role, climate, and process; the interview. Development of communications skills through practical class exercises.

Credit recommendation: In the lower division baccalaureate/associate degree category, 3 semester hours in Communication (1/78).

Disadvantaged Urban Population (IM-2)

Location: 140 Park Place, New York, NY.

Length: 45 hours (15 weeks).

Dates: September 1977—Present.

Objective: To provide students with an understanding of the causes and consequences of poverty as it impacts on selected urban populations.

Instruction: Causes and consequences of poverty in urban settings; disadvantaged populations, including immigrants, migrants, women, children, and the aged; analysis of, and comparison among, these groups; overview of human development and of major social institutions; responses to poverty within the social and economic context of New York City.

Credit recommendation: In the lower division baccalaureate/associate degree category, 3 semester hours in Sociology or Urban Studies (1/78).

Roots of the New York City Welfare System: Conflicts, Ideas, and Policies (Introduction to Social Welfare) (IM-1)

Location: 140 Park Place, New York, NY.

Length: 45 hours (15 weeks).

Dates: September 1977—Present.

Objective: To provide students with an overview of the historical and political context in which public welfare systems function.

Instruction: Public welfare programs; poverty; definitions and theories of the causes of poverty and how each determines the way of dealing with poverty; historical and philosophical background of poverty, from early methods of coping with the poor to current controversies in public assistance and welfare reform proposals; examination of welfare in New York City.

Credit recommendation: In the upper division baccalaureate category, 3 semester hours in Social Welfare (1/78).

Selected Programs and Procedures of the Human Resources Administration in New York City (IM-3)

Location: 140 Park Place, New York, NY.

Length: 45 hours (15 weeks).

Dates: January 1978—Present.

Objective: To provide students with an understanding of New York City's Human Resources Administration through a study of selected programs and procedures of that agency.

Instruction: Laws, regulations, and policies governing the operation of the Human Resources Administration of the City of New York, with special emphasis on the Department of Social Services, the Office of Case Intake and Management, the Agency for Child Development, and the Department of Family and Adult Services.

Credit recommendation: In the lower division baccalaureate/associate degree category, 3 semester hours in Human Services (1/78).

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EASTERN MASSACHUSETTS ASSOCIATION OF LAND SURVEYORS, INC.

The Eastern Massachusetts Association of Land Surveyors is a professional society serving all of Eastern Massachusetts except Cape Cod. The organization is an integral part of the Massachusetts Association of Land Surveyors and Civil Engineers, and is an affiliate of the American Congress on Surveying and Mapping. The Association was established in 1950 as a nonprofit organization dedicated to the advancement of the surveying profession.

In 1971 the Association started the School of Survey. Originally designed for the training of members of the Association, its offerings are now available on a national and even international basis to meet the continuing education needs of the profession. The original emphasis on lecture courses has now shifted to the correspondence method of instruction.

Source of official student records: Director, School of Survey, Eastern Massachusetts Association of Land Surveyors, Suite 1110, 80 Boylston Street, Boston, Massachusetts 02116.

Advanced Surveying Math I (A-1)

Location: Correspondence.

Length: Nine assignments.

Dates: February 1978—Present.

Objective: To introduce the student to some of the more difficult mathematical problems in dealing with surveying data.

Instruction: Trial and error solutions; line-line, curve-line, and curve-curve intersection determinations; complex highway geometry; precision; state plane coordinate system conversions; introduction to public land survey.

Credit recommendation: In the lower division baccalaureate/associate degree category, 1 semester hour in Surveying (2/78).

Advanced Surveying Math II (A-2)

Location: Correspondence.

Length: Nine assignments.

Dates: February 1978—Present.

Objective: To enable the student to understand some of the mathematical problems encountered in reducing surveying data.

Instruction: Three-point resections; spiral curves; probable error determinations; volumes around curves; earthworks.

Credit recommendation: In the lower division baccalaureate/associate degree category, 1 semester hour in Surveying (2/78).

Drainage for Surveyors (D)

Location: Correspondence.

Length: Nine assignments.

Dates: February 1978—Present.

Objective: To provide the student with a working knowledge of the elements of drainage design.

Instruction: Hydraulics including flow characteristics, hydraulic profiles, surcharge, head loss due to friction, formulas for flow in gravity conduits, and scouring velocities; estimating stormwater runoff; drainage areas; layout of drainage piping systems; load factors. A design project is included with ten problem sets.

Credit recommendation: In the upper division baccalaureate category, 2 semester hours in Civil Engineering, Forestry, or Survey Engineering (2/78).

1. Intermediate Surveying I (I-1C)
2. Intermediate Surveying II (I-2C)

Location: Correspondence.

Length: 1. Nine assignments.
2. Nine assignments.

Dates: February 1978—Present.

Objective: To provide the student with an understanding of the calculations involved in plane survey networks and the ability to use them.

Instruction: **Course 1:** Theory of precision and errors; traverse computation and adjustment; coordinate computation and plotting; areas; magnetic declination; earth curvature and refraction; peg test for levels with adjustment technique; computation and layout of simple curves. **Course 2:** Horizontal and vertical curves; sight distances; offsets; land descriptions; computation of end-areas and volumes; areas of curve segments, sectors, and externals.

Credit recommendation: **Course 1:** In the lower division baccalaureate/associate degree category, 1 semester hour in Surveying (2/78). **Course 2:** In the lower division baccalaureate/associate degree category, 1 semester hour in Surveying (2/78). **Both courses together:** In the lower division baccalaureate/associate degree category, 3 semester hours in Surveying (2/78).

Intermediate Surveying II (I-2C)

Refer to Intermediate Surveying (I-1C).

Photogrammetry (P-1C)

Location: Correspondence.

Length: Nine assignments.

Dates: February 1978—Present.

Objective: To provide the student with an introduction to the use of aerial photogrammetry as a tool for topographic mapping.

Instruction: Photographic principles; basic measurement techniques; the geometry of a vertical aerial photograph; flight planning; ground control; mosaics; radial-line triangulation; introduction to stereoplotting instruments.

Credit recommendation: In the lower division baccalaureate/associate degree category, 2 semester hours in Surveying (2/78).

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FEDERAL AVIATION ADMINISTRATION

The Federal Aviation Administration (FAA), a component of the United States Department of Transportation, serves primarily to insure aviation safety, promote air commerce, and support national security through management of the National Airspace System. Training programs are offered to employees in each of the 11 FAA regions in the United States, in the Washington headquarters and in the FAA's two specialized centers.

AIRWAY FACILITIES TRAINING PROGRAM

The courses listed below are part of the extensive training program of the Airway Facilities Service, which is responsible for the development, installation, and maintenance of National Airspace System facilities and electronic equipment that aid air navigation. The Airway Facilities Service conducts this training program, both within each region and in conjunction with the FAA national training facility. The courses fall into five groups: Navigational Aids, Radar, Data Systems, Communications, and Environmental Support.

The training progression, which leads to full performance or certification capability on designated types or pieces of equipment, generally includes correspondence study, courses taken in residence at the FAA Academy, and on-the-job training, followed by written and performance certification examinations. All technical training programs are conducted according to nationally prescribed standards. Frequently, centrally administered examinations (Prerequisite: Validation Examinations) are available by which an employee may demonstrate knowledge or competence sufficient to waive a required course. Correspondence study courses are designed and administered by the FAA Academy and include supervised, closed-book final examinations. Although taken at home and on the job, the courses include guidance from the Academy and from supervisory personnel at the work site. On-the-job training programs are designed by the FAA Academy and are administered by local supervisory personnel. On-the-job training objectives include expansion of previously completed training and/or preparation for subsequent courses.

Source of official student records: Registrar Unit, AAC-911A, Federal Aviation Administration Academy, Aeronautical Center, P.O. Box 25082, 6500 South MacArthur, Oklahoma City, Oklahoma 73125.

Airport Surveillance Radar, ASR-8 (40333)

Location: FAA Academy, Oklahoma City, OK.

Length: 240 hours (6 weeks).

Dates: December 1977—Present.

Objective: To train personnel responsible for the installation, evaluation, modification, maintenance and/or certification of the Airport Surveillance Radar (ASR-8).

Instruction: System concepts; system timing; klystron transmitter; normal receiver; digital MTI (Moving Target Indicator) system; STC (Sensitivity Time Control); diversity antenna system; control circuits. (Prerequisites: Radar Principles A 40329 and Radar Principles B 40330.)

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 4 semester hours in Radar Technology (2 lecture, 2 laboratory) (6/78).

AN/TPX-42 (40366)

Location: FAA Academy, Oklahoma City, OK.

Length: 240 hours (6 weeks).

Dates: December 1973—Present.

Objective: To train personnel responsible for the installation, evaluation, modification, maintenance, and/or certification of the AN/TPX-42—a radar beacon reply digitizer and decoder.

Instruction: System concepts; signal processor; reply detection unit; target report unit; data processor; beacon reply processor testing. Laboratory sessions develop skills in system alignment, system performance analysis, fault diagnosis, and use of test equipment. (Prerequisite: Radar Principles A 40329.)

Credit recommendation: In the lower division baccalaureate/associate degree category, 4 semester hours in Electronics Technology (3 lecture, 1 laboratory) (6/78).

Approach Light Systems (40124)

Location: FAA Academy, Oklahoma City, OK.

Length: 120 hours (3 weeks).

Dates: October 1976—Present.

Objective: To provide training in the operation and maintenance of specific equipment used in airport visual approach navigational aid lighting systems.

Instruction: Operating principles, comprehensive circuit analysis, and techniques of fault diagnosis for single-phase and three-phase substations ranging in size from 95 KVA to 175 KVA; sequence flashing lights and high intensity constant burning lights; high voltage series loop lighting systems. Laboratory sessions include fault diagnosis, performance analysis, test procedures, use of the test equipment, and routine checks and adjustments. (Prerequisites: Electrical Principles 40100 and Visual Landing Aids System 40123.)

Credit recommendation: In the lower division baccalaureate/associate degree category, 3 semester hours in Electrical Technology (1 lecture, 2 laboratory) (6/78).

ARTS-II for Supervisors (42015)

Location: FAA Academy, Oklahoma City, OK.

Length: 160 hours (4 weeks).

Dates: March 1978—Present.

Objective: To provide the supervisor with technical background necessary for the supervision of technicians responsible for the Automated Radar Terminal System (ARTS)-II.

Instruction: Complete system overview; system introduction; display keyboard operations; decoding data acquisition section; radar alphanumeric display subsystem; magnetic tape unit; TTY interfacing; ARTS-II programming; diagnostic programs; system evaluation; operation program organization. (Prerequisite: Principles of Digital Logic and Data Processing 44411.)

Credit recommendation: In the lower division baccalaureate/associate degree category, 4 semester hours in Computer Technology (2 lecture, 2 laboratory) (6/78).

ARTS-II for Technicians (42006)

Location: FAA Academy, Oklahoma City, OK.

Length: 600 hours (15 weeks).

Dates: August 1977—Present.

Objective: To train technicians responsible for the installation, maintenance, and repair of an Automated Radar Terminal System (ARTS II).

Instruction: Overall system introduction; digital electronics and logic of data acquisition subsystem and peripheral adapter module (data entry and display subsystems, input-output processor, interfacility data set, ARTS II programming, operational program organization, diagnostic programs, and system evaluation). Course consists of formal classroom lectures, supervised problem sessions, and laboratory exercises conducted on an operating ARTS II system. (Prerequisite: Principles of Digital Logic and Data Processing 44411.)

Credit recommendation: In the lower division baccalaureate/associate degree category, 15 semester hours in Computer Technology (6 lecture, 9 laboratory) (6/78).

ATCBI-5 (40339)

Location: FAA Academy, Oklahoma City, OK.

Length: 120 hours (3 weeks).

Dates: June 1977—Present.

Objective: To train personnel responsible for the installation, evaluation, modification, maintenance, and/or certification of the Air Traffic Control Beacon Interrogator (ATCBI-5) and digital defruiter.

Instruction: System concepts; pulse mode generator; stagger/destagger, sidelobe suppression and improved sidelobe suppression (SLS/ISLS); transmitter; receiver; monitors; control circuits; digital defruiter; beacon test set. Laboratory exercises develop skills in system alignment, system performance analysis, fault diagnosis, and use of test equipment. (Prerequisites: Radar Principles A 40329 and Radar Principles B 40330.)

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 2 semester hours in Radar Technology (1 lecture, 1 laboratory) (6/78).

Bright Radar Indicator Tower Equipment (BRITE-2/4) (40327)

Location: FAA Academy, Oklahoma City, OK.

Length: 120 hours (3 weeks).

Dates: October 1977—Present.

Objective: To provide training for technicians responsible for the alignment and maintenance of Bright Radar Indicator Tower Equipment (BRITE) video display systems—solid-state systems consisting of a high resolution Plan Position Indicator (PPI) for radar data viewed by a Charge-Coupled Television camera and TV displays operating at a 945 line rate.

Instruction: Electronic generation of sweep rotation; linearity correction; dynamic focus; video mix-

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ing on the PPI; storage vidicon theory and alignment; digital EIA synchronization generator; grating bar generation for linearity standard; resonant flyback sweep circuitry. Laboratory experiences cover application of grey scale, resolution pattern test equipment for realistic optimum alignment, recognition of system problems and fault analysis. (Prerequisite: Radar Principles A 40329.)

Credit recommendation: In the lower division baccalaureate/associate degree category, 2 semester hours in Electronics Technology (Video Technology) (1 lecture, 1 laboratory) (6/78).

BRITE Numerics (TPX-42) (40367)

Location: FAA Academy, Oklahoma City, OK.

Length: 80 hours (2 weeks).

Dates: July 1975—Present.

Objective: To train personnel responsible for the installation, evaluation, modification, maintenance, and/or certification of the TPX-42/BRITE (Bright Radar Indicator Tower Equipment) interface equipment. The Numerics Generation/Conversion Equipment accepts digital input data from the AN/TPX-42 decoding equipment and generates aircraft identity and altitude numerics data which are displayed in video form.

Instruction: Principles of operation; logic diagram analysis; problem solving on all elements of the TPX-42/BRITE interface equipment. Sessions develop skills in system alignment, system performance analysis, fault diagnosis, and use of test equipment. (Prerequisite: Radar Principles A 40329.)

Credit recommendation: In the lower division baccalaureate/associate degree category, 2 semester hours in Electronics Technology (laboratory) (6/78).

Cable Fault Analysis (40121)

Location: FAA Academy, Oklahoma City, OK.

Length: 80 hours (2 weeks).

Dates: March 1977—Present.

Objective: To provide instruction and laboratory exercises in the latest techniques of splicing power and communication cables and in the use of various types of signal and resistance measuring equipment in locating underground cable faults.

Instruction: Discussion of various types of cables, insulation, and shielding; methods and materials used in splicing high and low voltage power and communication cables and coaxial cables; cable fault locations using test equipment to determine the location and type of fault. (Prerequisite: Electrical Principles 40100.)

Credit recommendation: In the lower division baccalaureate/associate degree category, 2 semester hours in Electrical Technology (1 lecture, 1 laboratory) (6/78).

Central Control and Monitoring System (CCMS) Maintenance (43472)

Location: FAA Academy, Oklahoma City, OK.

Length: 320 hours (8 weeks).

Dates: January 1975—Present.

Objective: To train technicians responsible for the operation, maintenance, and evaluation of central computerized control and monitoring environmental systems.

Instruction: Digital logic and integrated circuitry; codes; computer programming; debugging; data storage and read-out; computer input/output devices (printer, teletype, and CRT); interfacing; computer organization. Laboratory experiences develop skills in equipment performance evaluation, fault diagnosis, test procedures, and routine checks and adjustments, (Prerequisites: Electrical Principles-Phase II 40126 and Central Control and Monitoring System (CCMS) Remote Operators 43474.)

Credit recommendation: In the lower division baccalaureate/associate degree category, 6 semester hours in Computer Technology (4 lecture, 2 laboratory) 6/78).

Electrical Principles—Phase II (40126)

Location: FAA Academy, Oklahoma City, OK.

Length: 160 hours (4 weeks).

Dates: October 1976—Present.

Objective: To provide the technician with the basic electronics needed for the subsequent study of advanced electronic systems.

Instruction: Review of basic AC and DC circuit theory; diodes, transistors, SCRs, UJTs, FETs, Logic Gates, Multivibrators, and Flip-Flops (R/S, and J-K); passive filters, amplifiers (basic, multistage, and power), operational amplifiers, integrators, and comparators; regulated power supplies. (Prerequisite: Electrical Principles 40100.)

Credit recommendation: In the lower division baccalaureate/associate degree category, 5 semester hours in Electrical or Electronics Technology or Industrial Electronics (3 lecture, 2 laboratory) (6/78).

Engine and Control Panels (40127)

Location: FAA Academy, Oklahoma City, OK.

Length: 200 hours (5 weeks).

Dates: October 1976—Present.

Objective: To provide training in the operation and maintenance of diesel- and gasoline-powered single-phase and three-phase engine generators.

Instruction: Magneto and battery ignition systems; carburetion, relays, switches, solenoids, and other circuit components; hydraulic and electrical speed control governors; automatic control circuits—principles of operation and troubleshooting. Laboratory sessions include fault diagnosis, performance analysis, test procedures, use of the test equipment, routine checks and adjustments. (Prerequisite: Electrical Principles 40100.)

Credit recommendation: In the lower division baccalaureate/associate degree category, 5 semester hours in Electrical or Mechanical Power Technology (2 lecture, 3 laboratory) (6/78).

Engine Generator Control Devices (40128)

Location: FAA Academy, Oklahoma City, OK.

Length: 120 hours (3 weeks).

Dates: November 1976—Present.

Objective: To provide training in the operation and maintenance of solid-state voltage regulators and governors, and solid-state monitoring of voltage and phase differential.

Instruction: Voltage regulators with differential amplifier control; magnetic amplifier control and transistor switching control; electronic governors with magnetic pickup unit control; electronic governors with current compensation control; solid-state relays used as voltage and phase differential monitoring and timing devices. (Prerequisites: Electrical Principles 40100 and Electrical Principles–Phase II 40126.)

Credit recommendation: In the lower division baccalaureate/associate degree category, 3 semester hours in Electrical or Mechanical Power Technology, Electrical Technology, or Electromechanical Technology (2 lecture, 1 laboratory) (6/78).

Environmental Systems and Controls (40133)

Location: FAA Academy, Oklahoma City, OK.

Length: 160 hours (4 weeks).

Dates: November 1976—Present.

Objective: To provide technicians with the knowledge required to evaluate, calibrate, and maintain pneumatic control systems and components as applicable to heating, ventilating, and air conditioning.

Instruction: Various types of pneumatic controls, including Johnson, Honeywell, Robertshaw, Barbara-Coleman, and Powers; properties and conditions of air; system analysis and balancing; pneumatic control of air handling equipment; environmental control systems; use of special test equipment; troubleshooting and calibration methods and performance evaluation. (Prerequisites: Air Conditioning 40114 and Heating, Ventilating, and Air Conditioning 40132, or an appropriate screening examination.)

Credit recommendation: In the lower division baccalaureate/associate degree category, 4 semester hours in Heating, Ventilation, and Air Conditioning Technology (2 lecture, 2 laboratory) (6/78).

Heating, Ventilating, and Air Conditioning (40132)

Location: FAA Academy, Oklahoma City, OK.

Length: 160 hours (4 weeks).

Dates: October 1976—Present.

Objective: To train personnel responsible for the installation, maintenance, and evaluation of boilers and heavy duty air-conditioning systems.

Instruction: Theory and construction of boilers and air conditioning; troubleshooting; water testing and treatment; boiler tube replacement methods; boiler operational safety; centrifugal chillers, motors, and controls; water distribution equipment; air handling; auxiliary equipment. (Prerequisite: Air Conditioning 40114 or an appropriate screening examination.)

Credit recommendation: In the lower division baccalaureate/associate degree category, 4 semester hours in Heating, Ventilation, and Air Conditioning Technology (3 lecture, 1 laboratory) (6/78).

High Capacity Voice Recorder (HCVR) (40016)

Location: FAA Academy, Oklahoma City, OK.

Length: 120 hours (3 weeks).

Dates: June 1976—Present.

Objective: To train personnel responsible for the installation, maintenance, and/or evaluation of the high capacity voice recorder system.

Instruction: Principles of magnetic recording; theory of operation of a modern high capacity voice recorder system. Laboratory experience focuses on the maintenance and troubleshooting of a particular high capacity voice recorder system. (Prerequisites: NAV/COM/RADAR Digital Logic Principles 44414 and Solid State Devices 44509.)

Credit recommendation: In the lower division baccalaureate/associate degree category, 3 semester hours in Audiovisual Technology or Electromechanical Technology (2 lecture, 1 laboratory) (6/78).

IOPB (42007)

Location: FAA Academy, Oklahoma City, OK.

Length: 360 hours (9 weeks).

Dates: June 1977—Present.

Objective: To train technicians, engineers, and system processor specialists responsible for the operation and maintenance of a programmable digital data processor and input/output controller (IOPB) used with the FAA's Automatic Radar Terminal System (ARTS).

Instruction: System introduction; processor instruction set; input/output instruction set; principles of programming (symbolic coding and machine language); processor hardware; input/output hardware; memory; utility software. (Prerequisite: Principles of Digital Logic and Data Processing 44411.)

Credit recommendation: In the lower division baccalaureate/associate degree category, 6 semester hours in Computer Technology or Data Processing (3 lecture, 3 laboratory) (6/78).

550 KW Diesel Engine Generators (40129)

Location: FAA Academy, Oklahoma City, OK.

Length: 120 hours (3 weeks).

Dates: September 1976—Present.

Objective: To train technicians for the operation, maintenance, and evaluation of a diesel engine power generator.

Instruction: Basic diesel engine theory; start/alarm panel, auxiliary control, air start system; fuel system, intake air and exhaust system; intercooler, lubrication system; cooling system, governor system, generator. (Prerequisite: Electrical Principles 40100.)

Credit recommendation: In the lower division baccalaureate/associate degree category, 3 semester hours in Mechanical Power Technology (1 lecture, 2 laboratory) (6/78).

Power Conditioning System (40131)

Location: FAA Academy, Oklahoma City, OK.

Length: 360 hours (9 weeks).

Dates: September 1976—Present.

Objective: To train technicians to operate and maintain the FAA's version of the uninterruptable power system with the critical power buss for computerized equipment.

Instruction: Heavy duty batteries and battery chargers; regulators, phase comparators, synchronizers and inverters; transformers; timing circuits and circuit breakers; sensing circuits, automatic selectors, logic circuits, interlocks, and remote display devices. Lectures and laboratories focus on concepts, circuit analysis, operation, evaluation, maintenance procedures, safety, troubleshooting, and fault correction down to the component level. (Prerequisite: Standby Power and Distribution Panel 40130.)

Credit recommendation: In the lower division baccalaureate/associate degree category, 6 semester hours in Electrical Technology (3 lecture, 3 laboratory) (6/78).

RML RF Retune (40346)

Location: FAA Academy, Oklahoma City, OK.

Length: 40 hours (1 week).

Dates: August 1973—Present.

Objective: To train technicians on the equipment and in the procedures required to satisfactorily effect frequency changes in all tuned waveguide, cavity, and RF filter components in the Radar Microwave Link (RML) systems.

Instruction: Laboratory experiences focus on carrying out on the operating link system major changes in all seven to eight GH_Z RF channel frequency determining elements such as Klystron tuning cavities, reference frequency cavities, waveguide bandpass filters, common waveguide coupling devices and automatic frequency control loops. The technicians ascertain that adjacent channel frequencies are minimum, and that bandwidth frequency response and power levels of all channels are within approved standards and tolerance. (Prerequisite: Any RML course.)

Credit recommendation: In the lower division baccalaureate/associate degree category, 1 semester hour in Communications Electronics (laboratory) (6/78). NOTE: In order to receive credit for this course, a student must also have successfully completed Radar Microwave Link System RML-1/2/3/4 (RML-T/R) 40322.

Sensor, Receiver, and Processor (SRAP) (42010)

Location: FAA Academy, Oklahoma City, OK.

Length: 160 hours (4 weeks).

Dates: April 1978—Present.

Objective: To train technicians responsible for the operation and maintenance of the Sensor/Receiver and Processor (SRAP) equipment which detects and processes both radar and beacon data for the FAA's Automated Radar Terminal System (ARTS) III-A.

Instruction: SRAP system overview; microcontroller operation; diagnostic programming; radar data acquisition; beacon data acquisition; message formatting; interfacing with the ARTS-III-A system. (Prerequisite: Principles of Digital Logic and Data Processing 44411.)

Credit recommendation: In the lower division baccalaureate/associate degree category, 4 semester hours in Computer Technology (2 lecture, 2 laboratory) (6/78).

Standby Power and Distribution Panel (40130)

Location: FAA Academy, Oklahoma City, OK.

Length: 240 hours (6 weeks).

Dates: May 1976—Present.

Objective: To train technicians in the installation, maintenance, and evaluation of the standby power and distribution equipment for Air Route Traffic Control Centers.

Instruction: Heavy duty power breakers; battery maintenance and testing; automatic engine synchronizers, electrical control devices, control circuits, and switch gear components; operation, evaluation, and troubleshooting of the complete electrical system. (Prerequisites: Electrical Principles—Phase II 40126 and 550 KW Diesel Engine Generators 40129.)

Credit recommendation: In the lower division baccalaureate/associate degree category, 4 semester hours in Electrical Technology (2 lecture, 2 laboratory) (6/78).

Visual Approach Slope Indicators (Solid State) (40125)

Location: FAA Academy, Oklahoma City, OK.

Length: 80 hours (2 weeks).

Dates: March 1977—Present.

Objective: To provide training in the operation and maintenance of specific equipment used in airport approach navigational aid lighting systems.

Instruction: Operating principles, comprehensive circuit analysis, and techniques of fault diagnosis for constant voltage controlled visual approach slope indicator (VASI) lights, constant current controlled visual approach slope indicator lights, and solid-state controlled VASI systems. Laboratory sessions include fault diagnosis, performance analysis, test procedures, use of the test equipment, and routine checks and adjustments. (Prerequisites: Electrical Principles 40100 and Electrical Principles—Phase II 40126.)

Credit recommendation: In the lower division baccalaureate/associate degree category, 2 semester hours in Electrical Technology (1 lecture, 1 laboratory) (6/78).

Visual Landing Aids System (40123)

Location: FAA Academy, Oklahoma City, OK.

Length: 80 hours (2 weeks).

Dates: October 1977—Present.

Objective: To provide training in the operation and maintenance of specific equipment used in airport visual approach navigational aid lighting systems.

Instruction: Operating principles, comprehensive circuit analysis, and techniques of fault diagnosis for Runway End Identifier Strobe Lights, Runway Alignment Strobe Lights, Runway Threshold Light Markers, and Medium Intensity Approach Lights. Laboratory sessions include fault diagnosis, performance analysis, test procedures, use of the test equipment, and routine checks and adjustments. (Prerequisite: Electrical Principles 40100.)

Credit recommendation: In the lower division baccalaureate/associate degree category, 2 semester hours in Electrical Technology (1 lecture, 1 laboratory) (6/78).

FEDERAL RESERVE BANK OF NEW YORK

The Federal Reserve Bank of New York is one of 12 regional banks which constitute the Federal Reserve System. The System's functions are to formulate and administer monetary policy, regulate and supervise banking, maintain an adequate flow of coin and paper money, and serve as fiscal agent for the Federal Government.

The Training Division of the Bank's Personnel Department offers training and development opportunities in management and supervisory skills, job-related skills, office skills, and language skills. The Training Division also administers the Bank's tuition payment program, provides educational counseling, and administers the performance appraisal program for nonsupervisory employees.

Source of official student records: Training Director, Training Division, Personnel Department, Federal Reserve Bank of New York, 33 Liberty Street, New York, New York 10045.

Beginning Stenography (Stenoscript) (FA-140)

Location: Head Office, 33 Liberty Street, New York, NY.

Length: 130 hours (26 weeks).

Dates: September 1974—Present.

Objective: To provide the student with an understanding of the principles of Stenoscript Shorthand in order to develop skill in shorthand dictation and transcription of business letters.

Instruction: Theory instruction in Stenoscript ABC Shorthand; speed dictation, including bank terminology; transcription exercises for spelling, punctuation, word usage, typing style, and proofreading; typewritten transcription practice. Upon completion of the course, students are able to take dictation at a minimum speed of 60 words per minute for three minutes and to transcribe mailable transcripts on the typewriter.

Credit recommendation: In the lower division baccalaureate/associate degree category, 3 semester hours in Secretarial Science (5/77). NOTE: Credit should not be awarded for this course if credit is awarded for Stenography Review FA-141.

Beginning Typing (FA-135)

Location: Head Office, 33 Liberty Street, New York, NY.

Length: 120 hours (24 weeks).

Dates: September 1975—Present.

Objective: To provide the student with basic skills in typewriting, and to develop production standards for letters, memoranda, tabulations, and rough drafts.

Instruction: Mastery of the keyboard with a minimum attainment level of 35 words per minute with a maximum of five errors on a five-minute timing; business letters; tabulations; memoranda; outlines; business forms; rough drafts; making corrections; use of punctuation and capitalization. Audiovisuals, cassette tapes, and texts are used.

Credit recommendation: In the lower division baccalaureate/associate degree category, 3 semester hours in Secretarial Science (5/77). NOTE: Credit should not be awarded for this sourse if credit is awarded for Refresher Typing FA-136.

Refresher Typing (FA-136)

Location: Head Office, 33 Liberty Street, New York, NY.

Length: 42 hours (14 weeks).

Dates: September 1975—Present.

Objective: To prepare the student who has had previous typewriting instruction and/or experience for future assignment as a typist; to enable the individual currently employed as a typist to improve his/her skills.

Instruction: This course, which covers the material presented in Beginning Typing (FA-135), is offered to employees who have some knowledge of typing procedures and who can touch type at least 20 words per minute. Depending on their level on entering the course, upon completion, students are able to type at a speed of 35-40 words per minute with a maximum of five errors on a five-minute timing.

Credit recommendation: In the lower division baccalaureate/associate degree category, 3 semester hours in Secretarial Science (5/77). NOTE: Credit

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should not be awarded for this course if credit is awarded for Beginning Typing FA-135.

Shorthand Dictation and Transcription

Refer to Stenography Review (FA-141).

Stenography Review (FA-141) (Formerly Shorthand Dictation and Transcription)

Location: Head Office, 33 Liberty Street, New York, NY.

Length: 42 hours (14 weeks).

Dates: April 1975—Present.

Objective: To prepare the student who has had previous shorthand instruction and/or experience for future assignment as a stenographer; to enable the individual currently employed as a stenographer to improve his/her skills.

Instruction: This course, which covers the material presented in Beginning Stenography (Stenoscript FA-140), is offered to employees who have knowledge of shorthand theory and the ability to take a one-minute dictation (and transcribe by typewriter) at 60 words per minute. Upon completion, students are able to take dictation at a minimum speed of 80 words per minute for three minutes and to transcribe mailable transcripts on the typewriter.

Credit recommendation: In the lower division baccalaureate/associate degree category, 3 semester hours in Secretarial Science (5/77). NOTE: Credit should not be awarded for this course if credit is awarded for Beginning Stenography (Stenoscript FA-140).

GRUMMAN CORPORATION

The Grumman Corporation, which started on Long Island in 1930 as the Grumman Aircraft Engineering Corporation, is the parent company for a number of manufacturing and marketing subsidiaries. These companies produce many types of aircraft for the armed forces and for the commercial market, as well as spacecraft for the National Aeronautics and Space Administration. In addition, they provide a range of other services, including computer systems and computer-related products, environmental studies and mapping services, and the manufacture of commercial products in the automotive, marine, and recreational fields.

GRUMMAN AEROSPACE CORPORATION

The Grumman Aerospace Corporation, located in Bethpage, Long Island, New York, is a wholly owned subsidiary of the Grumman Corporation. Grumman Aerospace designs, integrates, and produces major systems for both the military and space markets.

The Career Education and Development Center conducts a broad range of professional and management development courses for Grumman employees on Long Island and at other Grumman responsibility centers. Part of this effort is the Grumman Voluntary After-Hours Program which offers a comprehensive selection of job-related training courses.

Please note that the credit recommendations apply to *all* locations where the courses are offered.

Source of official student records: Director, Grumman Aerospace Corporation, Career Education and Development, Bethpage, New York 11714.

Integrated Circuits, Part II (FF 01572)

Location: Company classrooms, Bethpage High School, Bethpage, NY; other company locations throughout the United States.

Length: 37½ hours (15 weeks).

Dates: April 1976—Present.

Objective: To provide a thorough understanding of linear (analog) and digital circuits emphasizing combinatorial and sequential logic circuits.

Instruction: Historical background; review of the decimal number system; binary number system with concentration on conversion of various number systems such as binary to decimal and decimal to binary; various binary codes and conversion from any radix to radix 10; basic combinational logic (concentrating on truth tables, Karnaugh maps, and minimizing techniques); basic gates used in the build-up of combinational logic circuits and algebraic simplification methods; sequential logic; flip-flops and counters and their applications; registers and their applications. (Prerequisite: Introduction to Integrated Circuits FF 01571.)

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 3 semester hours in Electrical Engineering (12/77).

Introduction to Integrated Circuits (FF 01571)

Location: Company classrooms, Bethpage High School, Bethpage, NY; other company locations throughout the United States.

Length: 37½ hours (15 weeks).

Dates: September 1976—Present.

Objective: To provide a thorough understanding of hybrid ("h") parameters and the fabrication techniques of integrated circuit elements such as resistors, capacitors, diodes, and transistors.

Instruction: Review of Boolean algebra and DeMorgan's Laws; digital circuits analyzed from a DC as well as an AC point of view; various types of couplings with an emphasis on the practical aspect of each type; transistors found in integrated circuits (low and high frequency) and field effect transistors. The course consists of lectures, discussions, slides, and view-graphs.

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 3 semester hours in Electrical Engineering (12/77).

Introduction to Microprocessors (FF 01544)

Location: Company classrooms, Bethpage High School, Bethpage, NY; other company locations throughout the United States.

Length: 40 hours (16 weeks).

Dates: September 1976—Present.

Objective: To provide the student with the knowledge necessary to operate a microcomputer, design microcomputer systems, and write, debug, and execute assembly language computer programs.

Instruction: Specific hardware and software aspects of the Motorola 6800 microprocessor; similarities between the machine and other general purpose microprocessors. The course includes classroom lectures, microcomputer laboratory sessions, and assigned homework exercises. (Prerequisites: Introduction to Integrated Circuits FF 01571 and Integrated Circuits, Part II FF 01572, or the equivalent knowledge.)

Credit recommendation: In the upper division baccalaureate category, 3 semester hours in Electrical Engineering (12/77).

GRUMMAN DATA SYSTEMS INSTITUTE

The Grumman Data Systems Institute is the educational arm of CallData Systems, Inc. CallData is a nationwide multiservice subsidiary of Grumman Data Systems Corporation providing computing systems and services with associated training and education. In addition, the Corporation develops and markets computer-related products for government, business, and industry.

The Institute offers professional training in data processing for individuals in entry-level positions in the field. The Institute also provides this training for computer professionals who wish to keep up to date. The courses are available to employees of the Corporation as well as to the general public.

Source of official student records: Office of Financial Aid, Grumman Data Systems Institute, 280 Crossways Park Drive, Woodbury, New York 11797.

ANS COBOL (GICPCO1)

Location: 280 Crossways Park Drive, Woodbury, NY.

Length: 120 hours (4 or 10 weeks).

Dates: October 1975—Present.

Objective: To provide the student with basic concepts of COBOL programming and the ability to code simple programs.

Instruction: Introductory ANS COBOL programming; sequential, ISAM, and direct file processing; debugging; table handling; SORT and string statements. Students write and execute several programs. (Prerequisite: Fundamentals of Electronic Data Processing.)

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 6 semester hours in Electronic Data Processing (12/77).

Assembly Language (GICPAO1)

Location: 280 Crossways Park Drive, Woodbury, NY.

Length: 90 hours (3 or 7½ weeks).

Dates: October 1975—Present.

Objective: To enable the student to code programs in IBM/360/370 Assembly Language.

Instruction: Introduction to Assembly Language; Assembly Language programming, including floating-point and decimal arithmetic and macros. Students write and execute programs. (Prerequisite: Fundamentals of Electronic Data Processing.)

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 6 semester hours in Computer Science or Electronic Data Processing (12/77).

Customer Contact and Service (GIPACC1)

Location: 280 Crossways Park Drive, Woodbury, NY.

Length: 40 hours (1½ or 3½ weeks).

Dates: August 1976—Present.

Objective: To provide the student with a basic introduction to the supervisory process and to develop understanding of the nature of leadership.

Instruction: Introduction to the nature of supervision; the process of planning, organizing, and controlling; fundamentals of personality and behavior; motivation and communications; handling complaints and grievances; guiding employees and building job satisfaction and morale; personnel problems.

Credit recommendation: In the lower division baccalaureate/associate degree category, 2 semester hours in Supervision (12/77).

FORTRAN (GICPF01)

Location: 280 Crossways Park Drive, Woodbury, NY.

Length: 60 hours (2 or 5 weeks).

Dates: February 1970—Present.

Objective: To provide the student with basic concepts of FORTRAN programming and the ability to code programs.

Instruction: FORTRAN; syntax; expressions; assignments; control; input/output; format and subprograms. Students write and execute programs. (Prerequisite: Fundamentals of Electronic Data Processing.)

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 4 semester hours in Computer Science or Electronic Data Processing (12/77).

Fundamentals of Electronic Data Processing (GICPB01)

Location: 280 Crossways Park Drive, Woodbury, NY.

Length: 40 hours (1½ or 3½ weeks).

Dates: October 1975—Present.

Objective: To provide the student with a basic understanding of computers and their use as a prerequisite to pursuing more specific computer application courses.

Instruction: Introduction to concepts of computer hardware and software; data representation; stored program concepts. The course contains no practical computer programming experience.

Credit recommendation: In the lower division baccalaureate/associate degree category, 3 semester hours in Data Processing (12/77).

Introduction to Electronic Data Processing (GIPAB)

Location: 280 Crossways Park Drive, Woodbury, NY.

Length: 90 hours (3 or 7½ weeks).

Dates: August 1976—Present.

Objective: To provide a basic understanding of computers and their use for the nonprogramming data processing individual as a prerequisite to pursuing more specific computer application courses.

Instruction: Introduction to concepts of computer hardware and software; data representation; stored program concepts. The course contains no practical programming experience.

Credit recommendation: In the lower division baccalaureate/associate degree category, 1 semester hour in Data Processing if completed with one of the programming courses: (ANS COBOL, Assembly Language, FORTRAN, or Report Program Generator) (12/77).

Operating Systems Concepts/Job Control Language (GICPJ01)

Location: 280 Crossways Park Drive, Woodbury, NY.

Length: 90 hours (3 or 7½ weeks).

Dates: October 1975—Present.

Objective: To provide the student with the ability to communicate with the IBM Operating System (OS) via Job Control Language (JCL) and commonly used utilities.

Instruction: The seven JCL statements; cataloged procedures; OS utilities (IEBGENER, IEBPTPCH, IEBUPDTE, IEBCOPY, and IEHMOVE). Students write and execute programs. (Prerequisites: Fundamentals of Electronic Data Processing and one programming language.)

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 3 semester hours in Computer Science or Electronic Data Processing (12/77).

Report Program Generator (RPG) (GICPR01)

Location: 280 Crossways Park Drive, Woodbury, NY.

Length: 60 hours (2 or 5 weeks).

Dates: October 1975—Present.

Objective: To provide the student with basic concepts of Report Program Generator (RPG) programming and the ability to code simple programs.

Instruction: RPG programming cycle; input specifications; operation codes; special operation codes; output specifications. Students write and execute programs. (Prerequisite: Fundamentals of Electronic Data Processing.)

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 3 semester hours in Electronic Data Processing (12/77).

Systems Analysis (GISAS99)

Location: 280 Crossways Park Drive, Woodbury, NY.

Length: 195 hours (17 weeks).

Dates: August 1977—Present.

Objective: To develop the initial skills necessary to conduct a systems study for commercial applications within the framework established by a phased approach to systems analysis and design.

Instruction: The course consists of various modules associated with the development of a systems study. A case study approach is used to develop skills. Problem definition; fact gathering; interviewing techniques; data organization; fact analysis techniques; input/output design; presentation techniques; system implementation; test development procedures; system follow-up. (Prerequisites: ANS COBOL and Fundamentals of Electronic Data Processing.)

Credit recommendation: In the upper division baccalaureate category, 6 semester hours in Electronic Data Processing; or in the graduate degree category, 3 semester hours in Electronic Data Processing (12/77).

HOTEL ASSOCIATION OF NEW YORK CITY, INC.
NEW YORK HOTEL AND MOTEL TRADES COUNCIL, AFL-CIO

Fundamentals of Air Conditioning and Refrigeration

Location: 707 Eighth Avenue, New York, NY.

Length: 30 hours (15 weeks); 300 hours of independent study.

Dates: January 1973—Present.

Objective: To develop skills sufficient for entry-level work in servicing refrigeration units and air conditioners.

Instruction: Analysis and repair of heating and air-conditioning systems, including installation, controls, refrigerants, and motors.

Credit recommendation: In the lower division baccalaureate/associate degree category, 3 semester hours in Fundamentals of Heating, Ventilation, and Air Conditioning Technology (7/78).

INTERNATIONAL CENTER OF PHOTOGRAPHY

The International Center of Photography (ICP) is New York City's only museum devoted exclusively to photography. It is a nonprofit organization established in 1974 by the International Fund for Concerned Photography, Inc. ICP is dedicated to the appreciation of photography as the most important art/communication form of the 20th century with the capacity to provide images of man and his world that are both works of art and moments in history. ICP offers a unique program of education, exhibition, information, publications, and archival facilities.

The many aspects of ICP's educational program include darkroom workshops, vision and craft workshops, a series of lectures by contemporary photographers, and an internship program. Interviews are conducted and portfolios are reviewed by ICP staff to place students in workshops and courses commensurate with their ability and interest.

Source of official student records: Education Director, International Center of Photography, 1130 Fifth Avenue, New York, New York 10028.

Advanced Black-and-White Printing

Location: ICP, 1130 Fifth Avenue, New York, NY.

Length: 30 hours (10 weeks).

Dates: October 1977—Present.

Objective: To provide an opportunity for the study and development of fine printmaking techniques as a necessary craft and aesthetic in the creation and presentation of expressive photographs.

Instruction: Objectives of fine printing: tonal dynamics/aesthetic aims; zone system method of exposure; special compensating developers; developing by inspection; interpretative printing: choice of paper, print size, tonality, and contrast; specialized paper developers and their application; enlarging problems and techniques; effects of bleaching and toning (selenium/gold chloride); preparation of the print for presentation and exhibition; exhibit techniques (physical and aesthetic, lighting, hanging, and equipment/materials). Emphasis is on archival considerations. Students process their own film and prints outside of class. (Prerequisite: advanced level of work as indicated by interview with portfolio.)

Credit recommendation: In the upper division baccalaureate category, 2 semester hours in Photography (9/77).

Advanced Independent Study

Location: ICP, 1130 Fifth Avenue, New York, NY.

Length: Independent study.

Dates: October 1977—Present.

Objective: To provide an opportunity for concentrated, independent study and/or experience with professionals in a specialized field.

Instruction: A student's project is selected with the approval of ICP staff and is completed under the supervision of a working professional in the student's area of interest. Projects involve students in the many cultural, community, educational, and commercial activities of the New York metropolitan area. Examples of independent study projects include: apprenticeship in exhibition and curatorial activities at ICP; research projects on trends, influence of, or activities of contemporary and historical photographers; teaching photography to young children at museums and community centers; critical papers involving topics and lecturers in ICP's lecture, dialogue and/or interchange series; and appprenticeships to noted commercial photographers or photo-journalists. (Prerequisite: advanced level of work as indicated by interview with portfolio, or undergraduate background in art history or other appropriate discipline, or equivalent experience.)

Credit recommendation: Arrangements for awarding credit should be made on an individual basis by students with their academic institutions prior to undertaking the course. The amount and level of credit to be awarded will depend on the nature of each student's project (9/77).

Advanced Weekend Workshop

Location: ICP, 1130 Fifth Avenue, New York, NY.

Length: 20 hours (4 days); 2 nonconsecutive weekends plus a lengthy assignment completed between sessions.

Dates: October 1977—Present.

Objective: To provide the serious photographer with the opportunity to develop and refine skill in specific artistic, professional, and technical aspects of photography.

Instruction: Outstanding contemporary photographers and artists work with students to expand their perceptions and strengthen their professional direction through demonstrations, technical guidance, assignments, and critiques. Some topics and instructors include: still life and illustration (Dick Frank), book art (Marcia Resnick), color workshop (Marie Cosindas), natural science photography (Robert Sisson), Xerography-photography and the color copier (Jill Lynne), the fine photographic print (Joseph Saltzer), bridging commercial success and personal vision (Burk Uzzle), travel photography (Michael Edelson), and the freelance photographer (John and Marjorie Morris). (Prerequisite: advanced level of work as indicated by interview with portfolio.)

Credit recommendation: In the upper division baccalaureate category or in the graduate degree category, 1½ semester hours in Photography (9/77).

Assignment: Anywhere

Location: ICP, 1130 Fifth Avenue, New York, NY.

Length: 27½ hours (11 weeks).

Dates: September 1977—Present.

Objective: To provide in-the-field photographic experience in a variety of locations and situations under the guidance of a professional photographer.

Instruction: Camera handling techniques; creative exposure; indoor and outdoor lighting; materials and choice of equipment; problem solving in the field (poor lighting, uncooperative people, physical barriers, weather, and personal prejudices); color vs. black-and-white; sensitivity and awareness; photographing people in their environment. Students process their own film and prints outside of class. Following the 11 weeks of classroom instruction and assignments, students may elect to complete an independent study project under the supervision of the instructor. (Prerequisite: Intermediate Black-and-White Photography, Part II, or equivalent experience, and interview with portfolio.)

Credit recommendation: In the upper division baccalaureate category, 2 semester hours in Photography; if a student completes the independent study project, 1 additional semester hour is recommended (9/77).

Basic Color Printing (Type R and Cibachrome)

Location: ICP, 1130 Fifth Avenue, New York, NY.

Length: 30 hours (10 weeks).

Dates: October 1977—Present.

Objective: To provide instruction and practical experience in the production of color prints from color transparencies; to teach criteria for the selection of originals for reversal color processing; to permit the student to experiment with the creative controls available in the color printing process.

Instruction: Characteristics of color reversal printing papers; color printing equipment; reversal color printing chemistry and processing equipment; corrective filtration; creative controls; contrast control through masking; print finishing. (Prerequisite: Intermediate Black-and-White Photography, Part II, or equivalent experience, and interview with portfolio.)

Credit recommendation: In the lower division baccalaureate/associate degree category, 2 semester hours in Photography (9/77).

Editorial Concepts in Photography

Location: ICP, 1130 Fifth Avenue, New York, NY.

Length: 27½ hours (11 weeks).

Dates: September 1977—Present.

Objective: To enable the student to acquire skills in, and understanding of, the specialized demands of editorial concept and subject matter required to communicate photographically through books, magazines, and newspapers.

Instruction: Analysis of assignments and goals; evaluation of audience; overview of classic and contemporary photojournalism; development of objectives; self-evaluation of photographs; criteria for "interesting" images; analysis of contact sheets; isolation of subject matter. Students process their own film and prints outside of class. Following the 11 weeks of classroom instruction and assignments, students may elect to complete an independent study project under the supervision of the instructor. (Prerequisite: advanced level of work as indicated by an interview with portfolio.)

Credit recommendation: In the upper division baccalaureate category or in the graduate degree category, 2 semester hours in Photography; if a student completes the independent study project, 1 additional semester hour is recommended (9/77).

Elements of Perception

Location: ICP, 1130 Fifth Avenue, New York, NY.

Length: 27½ hours (11 weeks).

Dates: September 1977—Present.

Objective: To expand the student's perception through an understanding of the aesthetic and technical aspects of creating strong, personal photographs.

Instruction: Composition; point-of-view perspective; abstract imagery; formal and informal portraiture; landscape and cityscape; introductory concepts of zone system method of exposure control; creative use of lenses and filters. Students process their own film and prints outside of class. Following the 11 weeks of classroom instruction and assignments, students may elect to complete an independent study project under the supervision of the instructor. (Prerequisite: Intermediate Black-and-White Photography, Part I, or the equivalent, and interview with portfolio.)

Credit recommendation: In the upper division baccalaureate category, 2 semester hours in Photography; if a student completes the independent study project, 1 additional semester hour is recommended (9/77).

The Essay as Personal Statement

Location: ICP, 1130 Fifth Avenue, New York, NY.

Length: 27½ hours (11 weeks).

Dates: September 1977—Present.

Objective: To awaken an awareness of, and provide experience in, the application of multiple photographs in sequences, series, and essays as the vehicle for communicating a personal and/or social statement.

Instruction: Definitive exploration of "The Essay"; communication of personal concerns; incorporation of other media with still photographs; visual connections: sequences and series; the essay as a social document; the biographical and autobiographical essay. Students process their own film and prints outside of class. Following the 11 weeks of classroom instruction and assignments, students may elect to complete an independent study project under the supervision of the instructor. (Prerequisite: Intermediate Black-and-White Photography, Part II, or equivalent experience, and interview with portfolio.)

Credit recommendation: In the upper division baccalaureate category, 2 semester hours in Photography; if a student completes the independent study project, 1 additional semester hour is recommended (9/77).

Experimental Printing Processes, Part I

Location: ICP, 1130 Fifth Avenue, New York, NY.

Length: 30 hours (10 weeks).

Dates: October 1977—Present.

Objective: To enable the student to explore the aesthetics and use of light-sensitive photographic materials and alternative printing techniques.

Instruction: History of experimental processes and related aesthetic thought; Kodalith as a foundation material; experimental work with Kodalith: tone line, posterization, Sabattier effect; photomontage; multiple printing; color key; photo silk screen. In all cases, the effect of the process on the visual statement will be analyzed. Emphasis is on the transformation of the conventional photographic image for an expanded use of the medium. Students set up, test, and explore a number of light-sensitive materials outside of class. (Prerequisite: Intermediate Black-and-White Photography, Part II, or equivalent, and interview with portfolio.)

Credit recommendation: In the upper division baccalaureate category, 2 semester hours in Photography (9/77).

Experimental Printing Processes, Part II

Location: ICP, 1130 Fifth Avenue, New York, NY.

Length: 30 hours (10 weeks).

Dates: October 1977—Present.

Objective: To continue the exploration of the new aesthetics and transformations of conventional photographic images by alternative printing techniques (primarily nonsilver) begun in Part I.

Instruction: Review of Kodalith techniques; Rockland Photo-E-Mulsion; Blue Print Papers; Cyanotype; Gum Bichromate, Kwik-Proof, Xerography, and Argenta Photo Linen. In all cases, the effect of the process on the visual statement will be analyzed. Students set up, test, and explore a number of light-sensitive materials outside of class. (Prerequisite: Experimental Printing Process, Part I, or equivalent, and interview with portfolio.)

Credit recommendation: In the upper division baccalaureate category, 2 semester hours in Photography (9/77).

Explorations in Color Perception and Printing

Location: ICP, 1130 Fifth Avenue, New York, NY.

Length: 30 hours (10 weeks).

Dates: October 1977—Present.

Objective: To explore some of the modern directions, techniques, and ideas of color imagery; to experiment with image and hue manipulation techniques of color printing; to analyze the work of contemporary and past practitioners in the field; to keep abreast of color photographic materials; to apply these concepts to personal photographic projects.

Instruction: Nomenclature for criticism; color perception (human vs. film); archival-keeping properties of color materials; history of color photography; analysis of contemporary artistic trends; synthetic color and color in mixed media; modification of color chemistry; printing from unmasked negatives; emulsion manipulation of Polaroid materials; color solarization. Discussions, demonstrations, and darkroom work allow students to experiment with different developers, temperature controls, and various techniques to achieve special effects with color. Students undertake their own color print processing. Following the 10 weeks of classroom instruction and assignments, students may elect to complete an independent study project under the supervision of the instructor. (Prerequisites: Introduction to Color Photography or equivalent, Basic Color Printing or equivalent, and interview with portfolio.)

Credit recommendation: In the upper division baccalaureate category or in the graduate degree category, 2 semester hours in Photography; if a student completes the independent study project, 1 additional semester hour is recommended (9/77).

Intermediate Black-and-White Photography, Part I

Location: ICP, 1130 Fifth Avenue, New York, NY.

Length: 30 hours (10 weeks).

Dates: October 1977—Present.

Objective: To enable the student to refine his or her camera technique and darkroom skills, develop higher standards of self-criticism and working methods, and explore more difficult technical material, with increasing emphasis on aesthetics and creative content.

Instruction: Basic technical review; creative interpretative printing; techniques of flash; close-up photography; self-portraiture; characteristics of films and papers; sequential picture taking; candid and posed portraits; print finishing; light as medium; exposure to the world of contemporary photographers. Students develop their own film outside of class. (Prerequisite: Introduction to Black-and-White Photography, Part II, or equivalent, and interview with portfolio.)

Credit recommendation: In the lower division baccalaureate/associate degree category, 2 semester hours in Photography (9/77).

Intermediate Black-and-White Photography, Part II

Location: ICP, 1130 Fifth Avenue, New York, NY.

Length: 30 hours (10 weeks).

Dates: October 1977—Present.

Objective: To continue the general development of the techniques, skills, and creative aspects of photography to a level where students can begin to have consistent success and show reasonable competence as a photographer; to introduce advanced subject matter and material for the exploration of new photographic areas.

Instruction: Advanced interpretative printing; "concerned" photography; the extended visual statement; photographic books; photocopying; unconventional printing processes; artificial lighting; conceptual photography; exhibition quality printing and finishing; portfolio development. Emphasis is on development of personal direction and style through self-designed projects and extensive evaluations. Students develop their own film and do additional printing outside of class. (Prerequisite: Intermediate Black-and-White Photography, Part I, or equivalent, and interview with portfolio.)

Credit recommendation: In the lower division baccalaureate/associate degree category, 2 semester hours in Photography (9/77).

Introduction to Black-and-White Photography, Part I

Location: ICP, 1130 Fifth Avenue, New York, NY.

Length: 30 hours (10 weeks).

Dates: October 1977—Present.

Objective: To provide an introduction to the basic tools and creative techniques of black-and-white photography through specific photographic assignments.

Instruction: Film developing; printmaking; darkroom chemistry and procedures; camera and lens function; creative controls; composition; film and paper characteristics; exposure; dealing with subjects and subject matter; developing visual sensitivity. Text used *Photography, A Handbook of History, Materials, and Processes* by Charles Swedlund. Students develop their own film outside of class.

Credit recommendation: In the lower division baccalaureate/associate degree category, 2 semester hours in Photography (9/77).

Introduction to Black-and-White Photography, Part II

Location: ICP, 1130 Fifth Avenue, New York, NY.

Length: 30 hours (10 weeks).

Dates: October 1977—Present.

Objective: To continue the exploration of skills and ideas introduced in Part I through specific photographic assignments.

Instruction: Basic technical review; creative controls in the camera; creative manipulation in the darkroom; "light" as subject matter; candid photography; tripod photography; the concept and application of filters; lenses; photographic concepts of "motion"; print finishing. Students develop their own film outside of class. (Prerequisite: Introduction to Black-and-White Photography, Part I, or equivalent, and interview with portfolio.)

Credit recommendation: In the lower division baccalaureate/associate degree category, 2 semester hours in Photography (9/77).

Introduction to Color Photography

Location: ICP, 1130 Fifth Avenue, New York, NY.

Length: 27½ hours (11 weeks).

Dates: September 1977—Present.

Objective: To provide an introduction to, and practical experience in, the aesthetics and technical considerations of color photography through specific photographic assignments.

Instruction: "Seeing" in color; impact of color on the viewer; film types and film choice; lighting considerations and color balance; color as an aspect of image strength; filters for color films; exposure considerations; color perception: film vs. human; color processing and color printing. Following the 11 weeks of classroom instruction and assignments, students may elect to complete an independent study project under the supervision of the instructor. (Prerequisite: Intermediate Black-and-White Photography, Part II, or equivalent experience, and interview with portfolio.)

Credit recommendation: In the upper division baccalaureate category, 2 semester hours in Photography; if a student completes the independent study project, 1 additional semester hour is recommended (9/77).

Photographers on Photography—Applying the Masters for One's Own

Location: ICP, 1130 Fifth Avenue, New York, NY.

Length: 27½ hours (11 weeks).

Dates: September 1977—Present.

Objective: To increase control and awareness of all aspects of the student's own photography through careful analysis and emulation of the technique, vision, and emotional impact of selected masters of photography.

Instruction: Use of light; tonal qualities; analysis of style and subject matter; copying the masters of landscape, architecture, pictorial, portraiture, and advertising photography to broaden students' style and vision. Following the 11 weeks of classroom instruction and assignments, students may elect to complete an independent study project under the supervision of the instructor. (Prerequisite: advanced level of work as indicated by interview with portfolio.)

Credit recommendation: In the upper division baccalaureate category or in the graduate degree category, 2 semester hours in Photography; if a student completes the independent study project, 1 additional semester hour is recommended (9/77).

Photographing People

Location: ICP, 1130 Fifth Avenue, New York, NY.

Length: 27½ hours (11 weeks).

Dates: September 1977—Present.

Objective: To present, discuss, and explore the unlimited possibilities and special problems that arise when photographing strangers; to benefit from the experiences of the masters of that genre; to learn to deal with the psychological and social reactions that people have when they are the subject of a photograph.

Instruction: Visual and social sensitivity; use of the environment; candid photography; informal portraiture; dealing with strangers; press photography and photojournalism; technical tools for, and problems of, lighting for candid and informal work (emphasis on flash); photographic essays of people. Following the 11 weeks of classroom instruction and assignments, students may elect to complete an independent study project under the supervision of the instructor. (Prerequisite: Intermediate Black-and-White Photography Part II, or equivalent experience, and interview with portfolio.)

Credit recommendation: In the upper division baccalaureate category, 2 semester hours in Photography; if a student completes the independent study project, 1 additional semester hour is recommended (9/77).

Photography and Books

Location: ICP, 1130 Fifth Avenue, New York, NY.

Length: 27½ hours (11 weeks).

Dates: September 1977—Present.

Objective: To develop an understanding of the ways in which photography can be used in books to communicate ideas and concepts, to convey facts, or to evoke feelings.

Instruction: Photographic books (successes and failures); books with words; the function of the publisher; published photographers: work patterns, formulas, and experiences; writer and photo-researcher (views of the industry); technical aspects (editing, design, layout, typography, and color process vs. black-and-white printing). Guest lecturers include book designers and editors. Following the 11 weeks of classroom instruction and assignments, students may elect to complete an independent study project under the supervision of the instructor. (Prerequisite: advanced level of work as indicated by interview with portfolio.)

Credit recommendation: In the upper division baccalaureate category, 2 semester hours in Photography; if a student completes the independent study project, 1 additional semester hour is recommended (9/77).

Social Dilemma/Public Awareness

Location: ICP, 1130 Fifth Avenue, New York, NY.

Length: 27½ hours (11 weeks).

Dates: September 1977—Present.

Objective: To produce visual materials for social agencies and to assist them in furthering public awareness of a social problem; to give unseasoned photographers firsthand experience in job assignments that could run the gamut of covering an event, doing stories, audiovisuals, etc., and to give professional working people (social workers, guidance workers, teachers, etc.) who have photographic skills the opportunity to use photography with their work.

Instruction: Exploring methods of social research; historical, ethical, and social considerations for photographers undertaking such a project; correlating an agency's needs with talents; encountering sensitive situations and proceeding forward; producing audiovisuals for presentations; technical information concerning bad light conditions; collaborating for a final presentation and exhibit. Following the 11 weeks of classroom instruction and assignments, students may elect to complete an independent study project under the supervision of the instructor. (Prerequisite: Intermediate Black-and-White Photography, Part II, or equivalent, and professional or educational experience in a related social field.)

Credit recommendation: In the upper division baccalaureate category or in the graduate degree category, 2 semester hours in Photography; if a student completes the independent study project, 1 additional semester hour is recommended (9/77).

Subject as Artifact—Image as Reality

Location: ICP, 1130 Fifth Avenue, New York, NY.

Length: 27½ hours (11 weeks).

Dates: September 1977—Present.

Objective: To expand the student's conception of objective and subjective awareness by building a philosophical base for viewing and making images, drawing upon other visual resources in making statements, and developing an intimate relationship between the student and his or her photographic work.

Instruction: Exploring the "light" of the image; what makes an image "live"; using self as artifact; exploring family albums; what documentation attempts to do; relationships of images; investigating the consciousness via book/diary, notes, contacts, and so forth; exploring the myth and truth of images. Following the 11 weeks of classroom instruction and assignments, students may elect to complete an independent study project under the supervision of the instructor. (Prerequisite: Intermediate Black-and-White Photography, Part II, or equivalent.)

Credit recommendation: In the upper division baccalaureate category, 2 semester hours in Photography; if a student completes the independent study project, 1 additional semester hour is recommended (9/77).

Teachers' Workshop—Photography as an Educational Tool

Location: ICP, 1130 Fifth Avenue, New York, NY.

Length: 27½ hours (11 weeks).

Dates: September 1977—Present.

Objective: To provide information to teachers of all subject specialties concerning availability and use of visual resources; to instruct and provide practical experience in the techniques for production of slides, simple films, slide/tape programs, and other visual media; to explore young students' use of photography and related fields for self-development, social awareness, and data recording purposes.

Instruction: Assessing need; planning a storyboard; producing slides and overhead transparencies; simple slide/tape shows; student and teacher use of Polaroid and super-8 materials; sources of professionally produced visual and audiovisual materials; visual perception and visual defects; evaluation of programs. Following the 11 weeks of classroom instruction and assignments, students may elect to complete an independent study project under the supervision of the instructor. (Prerequisite: advanced level of work as indicated by interview with portfolio.)

Credit recommendation: In the upper division baccalaureate category or in the graduate degree category, 2 semester hours in Photography or Teacher Education; if a student completes the independent study project, 1 additional semester hour is recommended (9/77).

Urban Imagery

Location: ICP, 1130 Fifth Avenue, New York, NY.

Length: 27½ hours (11 weeks).

Dates: September 1977—Present.

Objective: To inspire and stimulate the student to a fresh consideration of the city as a source of visual vitality; to learn to technically and aesthetically deal with the specific character and problems particular to the subject matter.

Instruction: Documenting the forces of time and change; seeing above and below eye level; techniques of dealing with divisions and barriers; fragmentation: isolating subtle details; geometries: parallax problems; space (personal interpretations); surreal manipulation of reality; light and its effect on shape, depth, and texture. Following the 11 weeks of classroom instruction and assignments, students may elect to complete an independent study project under the supervision of the instructor. (Prerequisite: Intermediate Black-and-White Photography, Part II, or equivalent, and interview with portfolio.)

Credit recommendation: In the upper division baccalaureate category, 2 semester hours in Photography; if a student completes the independent study project, 1 additional semester hour is recommended (9/77).

The Zone System for All Formats

Location: ICP, 1130 Fifth Avenue, New York, NY.

Length: 27½ hours (11 weeks).

Dates: September 1977—Present.

Objective: To teach the techniques, discuss the applications, and provide experience in the zone system of photography.

Instruction: Perception of tone; translation of tone from human vision to final print; films, chemistry, and papers for zone system application; measurement of light; calibration of materials and equipment; sensitometry as it pertains to the zone system; print presentation; Polaroid materials for the zone system. (Prerequisite: Intermediate Black-and-White Photography, Part II, or equivalent, and interview with portfolio.)

Credit recommendation: In the upper division baccalaureate category, 2 semester hours in Photography (9/77).

LETCHWORTH VILLAGE DEVELOPMENTAL CENTER

Letchworth Village Developmental Center, which was founded in 1911, is a large State facility for the care and treatment of the mentally retarded. The Center is part of the New York State Department of Mental Hygiene. It has 2,500 residents and employs a staff of 2,500 persons. The Center is in transition from a primarily custodial institution to one in which active treatment designed to locate current residents in the larger community is stressed.

Within the Center the Education and Training Department is an administrative support unit which provides instructional programs to all the facility's staff. Programs are developed in various areas to address identified needs among the staff.

Source of official student records: Director, Education and Training Department, Letchworth Village Developmental Center, Thiells, New York 10984.

MENTAL HYGIENE THERAPY AIDE TRAINEESHIP

The courses listed below are part of the Mental Hygiene Therapy Aide Traineeship. This is a State-mandated one-year program of instruction, job performance, and evaluation. It is designed to increase the treatment skills of Therapy Aides working with the developmentally disabled. Over the one-year period there are 150 hours of classroom instruction and 160 hours of structured on-the-job training. The program is used in evaluating the trainee's ability to advance to permanent G-9 Mental Hygiene Therapy Aide status.

Please note that a student should successfully complete the one-year Traineeship in order to receive credit for any of the courses listed below.

Basics in Health Sciences

Location: Letchworth Village Developmental Center, Thiells, NY.

Length: 50 hours (52 weeks).

Dates: August 1976—Present.

Objective: To provide a basic knowledge of health aspects needed in the care of the retarded.

Instruction: Introduction to human biology; first aid; personal hygiene; common diseases; medication.

Credit recommendation: In the lower division baccalaureate/associate degree category, 2 semester hours in Health Science (10/77). NOTE: The entire one-year traineeship must be completed to receive credit.

Intervention Techniques in Mental Retardation

Location: Letchworth Village Developmental Center, Thiells, NY.

Length: 50 hours (52 weeks).

Dates: August 1976—Present.

Objective: To provide a basic introduction to the knowledge and skills needed in the habilitation and normalization of the mentally retarded.

Instruction: Behavior modification terminology and applications; interaction skills and team function; normalization.

Credit recommendation: In the lower division baccalaureate/associate degree category, 2 semester hours in Applied Behavioral Science (10/77). NOTE: The entire one-year traineeship must be completed to receive credit.

Practicum in the Care of the Retarded

Location: Letchworth Village Developmental Center, Thiells, NY.

Length: 160 hours (52 weeks).

Dates: August 1976—Present.

Objective: To provide a field experience in ongoing total care of the mentally retarded.

Instruction: Utilization of acquired skills in an applied work setting, including interaction with residents to maintain and promote physical and social functioning.

Credit recommendation: In the lower division baccalaureate/associate degree category, 2 semester hours in Applied Behavioral Science (10/77). NOTE: The entire one-year traineeship must be completed to receive credit.

LIFE OFFICE MANAGEMENT ASSOCIATION

Information Systems (8b-IS)

Location: Independent study and proficiency examination program administered from the central offices of LOMA.

Length: Independent study.

Dates: January 1978—Present.

Objective: To enable the student to examine information systems theory and practices.

Instruction: Planning, including research, analysis, and the establishment of I.S. objectives; designing systems; implementing, including application of software development and hardware selection. Review of technologies, including data base concepts, data entry techniques, and distributed processing. Specific management concepts related to information systems organizations, including personnel, operations, and projects. Emphasis is on information requirements definition, alternative solutions (including manual and automated), data base support, and management of the information systems function.

Credit recommendation: In the upper division baccalaureate category, 3 semester hours in Business or Information Systems (6/78).

Managerial Accounting (8b-MA)

Location: Independent study and proficiency examination program administered from the central offices of LOMA.

Length: Independent study.

Dates: January 1978—Present.

Objective: To provide the student with an introduction to managerial accounting with special emphasis on the use of accounting data for decision-making, planning, and control in a life insurance company.

Instruction: Particular emphasis is placed on the following topics: financial statements; operations planning and control; long-range planning; internal auditing; functional costs. Students are given an overview of the principles of GAAP, auditing and the computer, the budgetary process, and taxation in life insurance companies.

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 3 semester hours in Accounting or Life Insurance (6/78).

Systems and Data Processing (Part 7)

Location: Independent study and proficiency examination program administered from the central offices of LOMA.

Length: Independent study.

Dates: September 1977—Present.

Objective: To provide the student with a basic understanding of the importance and operation of data processing systems.

Instruction: Data processing and computing systems. Data processing techniques and methods: CPU; I/O; secondary storage; communications equipment; application and operating systems; application systems for insurance transactions. The student is introduced to the systems concept, the phases of the life cycle of a system, and the hardware and software components of computerized systems. The concepts and components of systems and data processing are illustrated through insurance industry application.

Credit recommendation: In the lower division baccalaureate/associate degree category, 3 semester hours in Business or Data Processing (6/78).

MANUFACTURERS HANOVER TRUST COMPANY

Manufacturers Hanover Trust Company, as one of the country's largest money center banks, provides lending, depository and related financial services to commercial, industrial, financial, and governmental customers, and a complete range of retail banking services to individuals and small- and medium-sized businesses. Manufacturers Hanover operates domestically through a network of 202 branches in New York City and its nearby counties, and through a number of specialized departments. Internationally, it operates through its New York City headquarters, an Edge Act subsidiary located in Los Angeles, overseas branches, and a network of representative offices, subsidiaries and affiliated banks and financial institutions and correspondent banks.

Management Training Program—Finance

The courses outlined below are part of Manufacturers Hanover's Management Training Program in Finance, which is the primary program for training lending officers for the Bank's metropolitan, national, and international divisions. Professional educators associated with graduate schools of business are hired to develop and teach the courses.

Source of official student records: Credit Department, Manufacturers Hanover Trust Company, 350 Park Avenue, New York, New York 10022.

Accounting

Location: Corporate headquarters, 350 Park Avenue, New York, NY.

Length: 75 hours (7-9 weeks).

Dates: February 1977—Present.

Objective: To provide the student with an understanding of accounting concepts and methods, thereby enabling him/her to fully understand financial statements and to analyze financial reports.

Instruction: Basic accounting concepts; the accounting cycle; generally accepted accounting principles; corporate investments; cash flow; reporting practices. Problem-solving exercises are used.

Credit recommendation: In the graduate degree category, 4 semester hours in Business Administration or Financial Accounting (4/78).

Corporate Finance

Location: Corporate headquarters, 350 Park Avenue, New York, NY.

Length: 39 hours (5 weeks).

Dates: March 1977—Present.

Objective: To provide the student with a comprehensive understanding of the ways in which businesses finance and organize their operations.

Instruction: Evolution of finance; capital budgeting; cost of capital; types of financing alternatives; directions of finance. Question sets and problem-solving exercises are used.

Credit recommendation: In the upper division baccalaureate category, 3 semester hours in Business Administration or Corporate Finance (4/78). NOTE: A student may elect to take an optional, additional final examination of a more rigorous nature. Upon successful completion of this examination, 3 semester hours of graduate, rather than undergraduate, credit is recommended in Business Administration or Corporate Finance.

Money and Banking

Location: Corporate headquarters, 350 Park Avenue, New York, NY.

Length: 42 hours (5 weeks).

Dates: October 1977—Present.

Objective: To provide the student with an overview of banking and the financial market.

Instruction: The financial community; financial markets; the banking industry; bank regulations; bank management; macroeconomics. Question sets are used.

Credit recommendation: In the upper division baccalaureate category, 3 semester hours in Business Administration or Money and Banking (4/78). NOTE: A student may elect to take an optional, additional final examination of a more rigorous nature. Upon successful completion of this examination, 3 semester hours of graduate, rather than undergraduate, credit is recommended in Business Administration or Money and Banking.

MISERICORDIA HOSPITAL MEDICAL CENTER

Misericordia Hospital Medical Center is a voluntary nonprofit teaching hospital located in the Bronx, New York. The hospital, with nearly 400 beds, provides a wide range of clinical services to the northeast Bronx, and has modern facilities for diagnosis, treatment, and research.

SCHOOL OF RADIOLOGIC TECHNOLOGY

The School of Radiologic Technology was established at Misericordia Hospital in 1967 when it was moved from St. Francis Hospital. Its major purpose is to meet the needs of the community for acquiring, training, and maintaining an adequate staff of well-qualified X-ray technologists.

The Radiologic Technology Program is a 24-month program of classroom and practical instruction. Its main objectives are to provide training in the theory and practice of radiologic technology, to enable graduates to perform the duties of a radiologic technologist at a high level of competence, and to meet the professional standards set by the American Registry of Radiologic Technologists and the New York State Department of Health, Bureau of Radiologic Technology. During the two years, students attend small, seminar-style classes, participate in laboratory sessions, work under close supervision in the hospital's radiology department, and receive individual training as needed.

Source of official student records: Registrar, Misericordia Hospital School of Radiologic Technology, Misericordia Hospital Health Sciences Building, 4401 Bronx Boulevard, Bronx, New York 10470.

Clinical Practicum

Location: Misericordia Hospital Medical Center, 233rd Street, Bronx, NY.

Length: 2,220 hours (2 years).

Dates: September 1971—Present.

Objective: To apply clinical experience necessary for the student to be able to apply concepts, skills, and knowledge effectively in radiology.

Instruction: Students function as learning members of the hospital's radiology department. Experience is provided in patient preparation, selection of proper techniques for radiographic analysis, administration of ionizing radiation for the purpose of diagnostic examination with appropriate radiation protection control. Close supervision is provided to develop and evaluate the students' clinical skills.

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 12 semester hours in Allied Health Sciences or Radiography (1/78).

Equipment Maintenance

Location: Misericordia School of Allied Health Science, 4401 Bronx Boulevard, Bronx, NY.

Length: 15 hours (16 weeks).

Dates: September 1971—Present.

Objective: To provide the student with an understanding of the general care, maintenance, and testing of radiographic equipment.

Instruction: General care of equipment; functional tests (spinning top, the step wedge, tomographic depths, and X-ray tube); causes, correction, and prevention of electrical breakdowns.

Credit recommendation: In the lower division baccalaureate/associate degree category, 1 semester hour in Radiography (1/78).

Film Critique

Location: Misericordia School of Allied Health Science, 4401 Bronx Boulevard, Bronx, NY.

Length: 45 hours (32 weeks).

Dates: September 1971—Present.

Objective: To enable the student to evaluate and improve the diagnostic quality of a radiograph.

Instruction: Patient profile, pathology, and condition during radiographic examination; technical factors and focus-film distance; collimation and shielding; positioning; anatomy; radiographic quality.

Credit recommendation: In the lower division baccalaureate/associate degree category, 3 semester hours in Allied Health Sciences or Radiography (1/78).

Fundamentals of Radiography

Location: Misericordia School of Allied Health Science, 4401 Bronx Boulevard, Bronx, NY.

Length: 45 hours (16 weeks).

Dates: September 1971—Present.

Objective: To provide the student with an overview of the history of radiography and to introduce the student to the clinical aspect of training through knowledge of medical terminology, contrast media, and ethics.

Instruction: History of radiology: discovery and major advancements; radiologic technology as a health profession specialty; organization of the hospital and the department of radiology. Medical terminology: recognition of the written and spoken language of medicine; modifications of meaning; radiographic terms; medical abbreviations and symbols. Contrast media: basic forms; precautionary steps in preparation and administration; patient preparation. Professional ethics: definition, scope, and nature; confidentiality; the technologist's obligations; medicolegal problems and solutions; New York State licensure.

Credit recommendation: In the lower division baccalaureate/associate degree category, 3 semester hours in Allied Health Sciences or Radiography (1/78).

Medical and Surgical Diseases

Location: Misericordia School of Allied Health Science, 4401 Bronx Boulevard, Bronx, NY.

Length: 15 hours (16 weeks).

Dates: September 1971—Present.

Objective: To provide the student with an understanding of the effect on radiographic technique of changes that occur in disease and injury.

Instruction: Principles used in the identification of circulatory, degenerative, and neoplastic diseases; conditions of illness involving the systems of the body, with stress on radiographic technology.

Credit recommendation: In the lower division baccalaureate/associate degree category, 1 semester hour in Allied Health Sciences (1/78).

Nuclear Medicine

Location: Misericordia School of Allied Health Science, 4401 Bronx Boulevard, Bronx, NY.

Length: 30 hours (16 weeks).

Dates: September 1971—Present.

Objective: To provide the student with an understanding of the basic principles of nuclear medicine including radiation detection and instrumentation as it applies to nuclear medicine.

Instruction: Nuclear science: structure of the atom; nuclides and radionuclides; origin of nuclides. Clinical nuclear medicine: fundamentals of scanning; radiation detection; instrumentation; clinical procedures.

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 2 semester hours in Allied Health Sciences or Nuclear Medicine (1/78).

Nursing Procedures

Location: Misericordia School of Allied Health Science, 4401 Bronx Boulevard, Bronx, NY.

Length: 15 hours (16 weeks).

Dates: September 1971—Present.

Objective: To provide the student with an understanding of the proper methods of assisting and moving the patient, basic first aid procedures, aseptic techniques, and management of the seriously ill or injured patient.

Instruction: Body mechanics; aseptic technique; management of seriously ill or injured patient (acute abdomen, fractures, and dislocations); patient reaction to iodinated contrast media; the emergency tray/cart; basic first aid; nursing procedures pertinent to radiology (anesthesia, operating room radiography, bedside radiography, and handling patients with communicable diseases).

Credit recommendation: In the lower division baccalaureate/associate degree category, 1 semester hour in Allied Health Sciences (1/78).

Principles of Radiographic Exposure

Location: Misericordia School of Allied Health Science, 4401 Bronx Boulevard, Bronx, NY.

Length: 60 hours (32 weeks).

Dates: September 1971—Present.

Objective: To provide the student with an understanding of the principles involved in the formation of the latent radiographic image and their application to different situations.

Instruction: Definitions; characteristics of X-rays; formation of the latent image; intensifying and fluoroscopic screens; prime factors of radiographic exposure; factors controlling and affecting radiographic quality; beam restricting devices (collimators, cones, cylinders, and diaphragms); filters; grids; stereoscopy; conditions influencing choice of chart; kilovoltage and milliamperage; review of grid conversion factors; review of screen conversion factors; kilovoltage distance conversion factors; use of higher kilovoltages; demonstration of radiographic experiments.

Credit recommendation: In the lower division baccalaureate/associate degree category, 4 semester hours in Allied Health Sciences or Radiography (1/78).

Radiation Biology

Location: Misericordia School of Allied Health Science, 4401 Bronx Boulevard, Bronx, NY.

Length: 30 hours (16 weeks).

Dates: September 1971—Present.

Objective: To provide the student with the knowledge of elementary pathology as it relates to radiotherapy and radiation biology and the effects of ionizing radiation on biological systems.

Instruction: Elementary pathology; radiation and tumors; treatment planning; short-term effects of ionizing radiation; long-term somatic effects of ionizing radiation; biological effects of ionizing radiation; radiation effects of mitosis; oxygen effect.

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 2 semester hours in Allied Health Sciences or Biology (1/78).

Radiation Protection

Location: Misericordia School of Allied Health Science, 4401 Bronx Boulevard, Bronx, NY.

Length: 45 hours (16 weeks).

Dates: September 1973—Present.

Objective: To enable the student to understand ionizing radiation and the need for protective measures and maximum safety in radiography.

Instruction: Properties and production of X-rays; radiation units of measurements; interactions of radiation with matter; maximum permissible dose; principles of safety; introduction to radiation detection instruments; protective barriers; ionizing radiation and public health.

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 3 semester hours in Allied Health Sciences (1/78).

Radiographic Anatomy and Physiology

Location: Misericordia School of Allied Health Science, 4401 Bronx Boulevard, Bronx, NY.

Length: 90 hours (32 weeks).

Dates: September 1971—Present.

Objective: To provide the student with knowledge of the structure and function of the human body with emphasis on radiographic aspects.

Instruction: The body as an integrated whole; skeletal and articular systems; axial and appendicular skeleton; muscular system; integration and control of the body; circulatory and lymphatic systems; respiratory, digestive, and urinary systems; reproduction; endocrine system and fluids and electrolytes. Laboratory work is *not* included.

Credit recommendation: In the lower division baccalaureate/associate degree category, 6 semester hours in Allied Health Sciences or Biology (1/78).

Radiographic Positioning

Location: Misericordia School of Allied Health Science, 4401 Bronx Boulevard, Bronx, NY.

Length: 120 hours (48 weeks); includes 15 hours of laboratory work.

Dates: September 1971—Present.

Objective: To enable the student to identify and utilize the correct procedures to follow in positioning patients for radiography.

Instruction: General positioning: radiography of upper and lower extremities; chest; shoulder; clavicle; scapula; pelvis and hip; ribs; bony thorax; vertebral column; gastrointestinal tract; urinary tract; skull. Positioning for pediatric radiography. Skull radiography: terminology; routine skull series; sella turcica; optic foramina; orbital structures; mastoid processes of temporal bones; temporal styloid processes; pars petrosae of temporal bones; paranasal sinuses; facial and nasal bones and teeth.

Credit recommendation: In the lower division baccalaureate/associate degree category, 7 semester hours in Allied Health Sciences or Radiography (1/78).

Radiographic Processing

Location: Misericordia School of Allied Health Science, 4401 Bronx Boulevard, Bronx, NY.

Length: 45 hours (16 weeks).

Dates: September 1971—Present.

Objective: To enable the student to develop the knowledge and skills necessary for darkroom procedure, to identify the chemical constituents of processing solutions and their functions, and to understand duplication of film and subtraction techniques.

Instruction: Darkroom procedures and chemical constituents and functions of processing solutions. Processing room design and function; photographic process, manual processing (the developer, rinsing, fixer, washing, and drying); preparation of solutions; automatic processing; radiographic film artifacts and their causes; silver reclamation; improvement of the diagnostic quality of radiographs by film evaluation.

Credit recommendation: In the lower division baccalaureate/associate degree category, 3 semester hours in Allied Health Sciences or Radiography (1/78).

Radiologic Physics

Location: Misericordia School of Allied Health Science, 4401 Bronx Boulevard, Bronx, NY.

Length: 75 hours (32 weeks).

Dates: September 1971—Present.

Objective: To provide the student with a knowledge of the general theories of physics as they apply to radiographic practice.

Instruction: Fundamentals of mathematics: fractions; ratio and proportions; square roots; power of ten; elementary algebra and plane geometry as they apply to radiography. Radiologic physics: fundamental units; derived units; mechanics; matter; electrostatics; magnetism; electrodynamics; electromagnetism; transformers; X-ray tubes; roentgen rays; interaction of radiation and matter. Laboratory work is *not* included.

Credit recommendation: In the lower division baccalaureate/associate degree category, 6 semester hours in Allied Health Sciences or Physics (1/78).

Special Procedures

Location: Misericordia School of Allied Health Science, 4401 Bronx Boulevard, Bronx, NY.

Length: 60 hours (32 weeks).

Dates: September 1971—Present.

Objective: To provide the student with a knowledge of the supplementary procedures used in advanced technology and related radiographic equipment.

Instruction: Design, function, and maintenance of radiographic equipment used for special procedures: high output generators; special tables; rapid serial changes; pressure injectors; Polaroid units; phototiming units; photofluorographic equipment. Supplementary procedures: tomography; stereo radiography; direct enlargement radiography; mobile radiography; thermography; xeroradiography; ultrasonography. Specific radiographic procedures. Imaging.

Credit recommendation: In the lower division baccalaureate/associate degree category, 4 semester hours in Allied Health Sciences or Radiography (1/78).

Topographic Anatomy

Location: Misericordia School of Allied Health Science, 4401 Bronx Boulevard, Bronx, NY.

Length: 30 hours (16 weeks).

Dates: September 1971—Present.

Objective: To provide the student with an understanding of topographic anatomy as applied to radiography.

Instruction: A study of topographic anatomy, the relationship of organs to each other, and the location of organs using surface landmarks. Upper and lower extremities; neck; chest; abdominal and pelvic cavities; head. Radiographic film evaluation to identify topographic anatomic structures.

Credit recommendation: In the lower division baccalaureate/associate degree category, 2 semester hours in Allied Health Sciences, Biology, or Radiography (1/78).

NATIONAL JOINT APPRENTICESHIP AND TRAINING COMMITTEE FOR THE ELECTRICAL INDUSTRY

The National Electrical Course for Apprentice Inside Wiremen has been developed by the National Joint Apprenticeship and Training Committee for the Electrical Industry. This committee, whose office is located in Lanham, Maryland, is jointly sponsored by the International Brotherhood of Electrical Workers (IBEW) and the National Electrical Contractors Association, Inc. (NECA).

Inside wiremen are responsible for the installation of all wires, busses, conduits, switches, converters, transformers, electric motors, and other electrical apparatus of a stationary nature. On construction work in the United States and Canada they install electrical systems in residential, commercial, and industrial buildings. In the missile and space programs they install the complex systems that guide missiles and submarines.

The National Committee updates the national curriculum for the four-year program on a regular basis. It also provides instructors' guides, student workbooks, resource materials, standard application and rating forms, and examinations to every local Joint Apprenticeship and Training Committee (JATC) throughout the country. Each JATC is responsible for administering the national curriculum and maintaining the quality of instruction in accord with the national standards. When an apprentice successfully completes the four-year program combining classroom instruction with supervised on-the-job training, he or she is certified as a journeyman electrician.

During the evaluation of the National Course it was determined that the JATC's located in the areas listed below after "Location" conduct the course according to the national standards and with satisfactory quality controls. When a postsecondary institution is considering awarding credit to persons who have completed the National Course under a JATC in another location, it should first request the following information from that JATC. (1) What is its selection procedure for apprentices? Does it follow the national admission requirements of a high school diploma and one year of high school algebra? (2) Does it use the national curriculum and the national examinations? (3) What grading system does it follow? What is its passing grade? What are its criteria for retention in the apprenticeship program? (4) What rating and record-keeping system is followed for the on-the-job training component? (5) What are its qualifications for instructors, in terms of work experience and education, to insure that they are adequately prepared to teach the subject matter? What is the normal class size? (6) Can it supply an official record of a person's successful completion of the National Course?

Source of official student records: Administrator of the apprenticeship program in the area or (where applicable) the Business Manager of the IBEW Local in the area.

National Electrical Course for Apprentice Inside Wiremen

Location: Dunkirk (Local 593); Ellenville (Local 806); Geneva (Local 840); Newburgh (Local 631); New City (Local 363); Niagara Falls (Local 237); Oswego (Local 328); Plattsburgh (Local 781); Poughkeepsie (Local 215); Rochester (Local 86); Schenectady (Local 166); Syracuse (Local 43); Utica (Local 181); Watertown (Local 910).

Length: Classroom Instruction—576 hours.
On-the-Job Training—minimum of 7,000 hours.

Dates: January 1969—Present.

Objective: To provide apprentices with the knowledge and skills needed to qualify them as journeymen electricians.

Instruction: Classroom—Applied mathematics; basic DC and AC (including 3-phase) circuits; blueprint reading; principles of transformers, motors, and generators; motor controls; basic electronics and power supplies; safety considerations; standard trade practices; national electrical code. Lectures and demonstrations are used. **On-the-Job Training**—Development of skills in the use of hand tools; instruction and practice in the installation of signal wiring systems; residential, commercial, and industrial wiring for light and power; installation and maintenance of transformers, motors, generators, and controls.

Credit recommendation: In the lower division baccalaureate/associate degree category, 32 semester hours in Electrical Construction (16 lecture, 16 shop) (3/78).

NEW YORK INSTITUTE OF CREDIT

The New York Institute of Credit (NYIC) is the educational arm of the New York Credit and Financial Management Association, local chapter of the National Association of Credit Management. It provides academic and professional courses and programs to commercial credit, bank lending and factoring personnel in approximately 200 firms in greater New York City.

The courses listed below constitute a majority of the Institute's Associate, Fellow, and 900-Hour Certificate Programs. Courses are taught in the NYIC classrooms located at 71 West 23rd Street in New York City, and various bank and college facilities in the New York City area.

Source of official student records: Office of the Registrar, New York Institute of Credit, 71 West 23rd Street, New York, New York 10010.

Accounting I

Location: Institute classrooms and various bank and college facilities in the New York City area.

Length: 60 hours (15 weeks).

Dates: September 1974—Present.

Objective: To provide the student with an understanding of the fundamentals of accounting theory and practice.

Instruction: Form of financial statements; accounting for long- and short-term borrowing; assets and depreciation; concept of a going concern; materiality, conservationism, and the matching of revenues and expenses; current topics in accounting, including current value emphasis.

Credit recommendation: In the lower division baccalaureate/associate degree category, 3 semester hours in Accounting (6/78).

Advanced Credit in International Trade (International Trade)

Location: Institute classrooms and various bank and college facilities in the New York City area.

Length: 30 hours (15 weeks).

Dates: September 1977—Present.

Objective: To provide the student with an introduction to the financing of international trade, with emphasis on current techniques.

Instruction: Overview of export promotion agencies in the United States, including the Foreign Credit Insurance Association and the Export Import Bank of the United States; introduction to international trade.

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 2 semester hours in International Trade (6/78).

1. Bank Lending I
2. Bank Lending II

Location: Institute classrooms and various bank and college facilities in the New York City area.

Length: 1. 30 hours (15 weeks).
2. 30 hours (15 weeks).

Dates: 1. September 1974—Present.
2. September 1974—Present.

Objective: To provide the student in banking or related fields with a basic introduction to the issues and analytical tools involved in commercial lending decisions, and the opportunity to apply those tools through the use of case studies.

Instruction: Credit policy; basic analytical tools for credit analysis, such as ratio analysis, cash flow analysis, and analysis of financial statements. Application of analytical tools to practical commercial situations, such as seasonal loans, cash flow lending, and evergreen loans through the use of case studies.

Credit recommendation: In the lower division baccalaureate/associate degree category, 3 semester hours in Commercial Lending (6/78).

Bank Lending II

Refer to Bank Lending I.

Business Communications I

Location: Institute classrooms.

Length: 30 hours (15 weeks).

Dates: September 1974—Present.

Objective: To enable the student to develop skills in written business communications.

Instruction: Theory and practice of preparing various types of business letters, including credit and collections, applications, inquiries, orders, claims, and adjustments. Stress on correct grammar and effective writing.

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 2 semester hours in Business Communications (6/78).

Business Communications II

Location: Institute classrooms.

Length: 30 hours (15 weeks).

Dates: January 1975—Present.

Objective: To enable the student to develop effective oral communication skills.

Instruction: Acquisition of basic skills and confidence needed to speak effectively; introduction to the behavioral principles underlying effective oral communications. The organization of content; building self-confidence and poise; the use of body and voice mechanisms as effective tools of thought communication; development of listening skills.

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 2 semester hours in Business Communications (6/78).

Business Communications III (Business Report Writing)

Location: Institute classrooms and various bank and college facilities in the New York City area.

Length: 30 hours (15 weeks).

Dates: January 1975—Present.

Objective: To enable the student to apply advanced communication skills in researching and writing.

Instruction: Importance of effective report writing; researching, collecting, and organizing information; presentation of oral and written formal, special, and short reports; writing techniques; use of visual aids; approaches to business communications. (Prerequisite: Business Communications I or the equivalent.)

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 2 semester hours in Business Communications (6/78).

Business Organization

Location: Institute classrooms.

Length: 30 hours (15 weeks).

Dates: January 1976—Present.

Objective: To introduce the student to the development of the American business organization in its diverse forms.

Instruction: History and nature of American business; business environment, social responsibility, and ethics; organization and management; management activities and functions; financing business; problems and policies; nature and scope of marketing; distribution; advertising; personnel; production.

Credit recommendation: In the lower division baccalaureate/associate degree category, 2 semester hours in Business Administration (6/78).

Business Psychology

Location: Institute classrooms.

Length: 30 hours (15 weeks).

Dates: September 1974—Present.

Objective: To develop an understanding of current concepts in psychology and their relationship to the business world.

Instruction: Interpersonal relationships; group behavior; group pressures and group dynamics; the working environment; emotional health and creativity.

Credit recommendation: In the lower division baccalaureate/associate degree category, 2 semester hours in Applied Behavioral Science (6/78).

1. Credit Law I (Introduction to Business Law)
2. Credit Law II

Location: Institute classrooms and various bank and college facilities in the New York City area.

Length: 1. 30 hours (15 weeks).
2. 30 hours (15 weeks).

Dates: 1. September 1974—Present.
2. September 1974—Present.

Objective: To provide the student with a basic understanding of business law in American society.

Instruction: Forms of business organizations; property; Uniform Commercial Code; bankruptcies and insolvencies.

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 3 semester hours in Commercial Law (6/78).

Credit Law II

Refer to Credit Law I.

Factoring and A/R Financing

Location: Institute classrooms.

Length: 30 hours (15 weeks).

Dates: September 1974—Present.

Objective: To provide the student with an introduction to factoring and accounts receivable financing.

Instruction: Factoring techniques including bookkeeping, documentation, field auditing, internal controls, and cash flows. (Prerequisites: Credit and Collections and Financial Statement Analysis.)

Credit recommendation: In the lower division baccalaureate/associate degree category, 2 semester hours in Finance (6/78).

Marketing

Location: Institute classrooms.

Length: 30 hours (15 weeks).

Dates: September 1974—Present.

Objective: To provide the student with an introduction to marketing.

Instruction: Survey of basic concepts of marketing, such as consumer behavior, advertising, pricing, marketing research, wholesale and retail distribution, and promotional strategy.

Credit recommendation: In the lower division baccalaureate/associate degree category, 2 semester hours in Marketing (6/78).

NEW YORK STATE ASSEMBLY

The New York State Assembly is one of the two houses of the State Legislature. Its major function is the consideration and enactment of legislation.

The Assembly established the Intern Program in 1971. It is directed by a bi-partisan committee of legislators with strong interests in education. The Assembly Intern Committee is provided for in the Assembly Rules and its membership includes legislative leaders. The Committee has a permanent staff which carries on the day-to-day activities of the program with the assistance of an advisory panel of staff members of the Legislature. In addition, the Committee appoints a professor-in-residence each year to supervise the educational aspects of the program. The program is open to New York State residents matriculated in a college or university degree program as juniors, seniors, or graduate students. Exceptional sophomores may also apply.

The Assembly Intern Committee develops the basic structure of the Intern Program with the support of its advisory panel and staff. Since the program was established, it has been expanded and refined through six years of experience and consultation with students and college faculty.

Source of official student records: Coordinator, Assembly Intern Program, The Capitol, Room 518, Albany, New York 12248.

Assembly Intern Program

Location: The State Capitol, Albany, NY.

Length: 20 weeks (Assembly Session); minimum of 30 hours per week.

Dates: January 1978—Present.

Objective: To provide the student with an in-depth experience combining the theory and practice of the legislative process in order to develop research, communication, and interpersonal skills and an understanding of the way in which the Legislature works.

Instruction: The program begins with a comprehensive week-long orientation to the operation of the State government, with particular reference to the workings of the Legislature. Interns then receive full-time job assignments in the office of an Assemblyman or Assembly committee; the assignments are based on a work plan and a learning contract between a supervisor and an intern; tasks involve constituent work, research on specific legislation, research on the legislative process, and office administration; supervisors are either members of the Assembly, members of their legal or research staffs, or committee staff; job performance is formally evaluated on a regular basis by the supervisors. During the course of the program, interns participate in seminars covering such topics as Descriptive Statistics, Evaluating Social Programs, Behavior of Legislators, Legislative Decisionmaking, and Current Political Issues. Interns receive academic guidance and support, on an individual and group basis, from the permanent program staff, from the professor-in-residence, and from staff within the Assembly (and the State government) who work with the interns on specific topics and who provide them with a unique blend of academic and practical expertise. The professor-in-residence evaluates the interns at regular intervals and at the end of the program.

Credit recommendation: In the upper division baccalaureate category, 15 semester hours in appropriate departments or in general elective credit (4/78).

NEW YORK STATE COMMISSION OF CORRECTION

The Commission of Correction is primarily responsible for inspecting and monitoring correctional institutions in the State. These include State penitentiaries, county jails, and local police lock-ups. In addition, the Commission investigates unusual incidents occurring in these facilities to insure the safety and welfare of all persons involved, and has the power to close a facility if necessary.

The Commission provides correctional training for persons employed in State, county, and local correctional facilities. Its primary training emphasis is at the county level where it trains approximately 1,000 deputy sheriff corrections officers annually. The Training Unit is part of the Commission's Local Facilities Bureau. The Bureau also includes an Investigation and Inspection Unit and a Technical Assistance Unit. Through the interaction of the three units, the Commission is strengthening the management and operation of local correctional facilities.

Source of official student records: Director of Training, Commission of Correction, Correctional Services Training Academy, 1134 New Scotland Road, Albany, New York 12208.

Basic Training Program—Phases I and II (Introduction to Corrections)

Location: New York State Correctional Services Training Academy, 1134 New Scotland Road, Albany, NY.

Length: 62½ hours (2 weeks).

Dates: January 1978—Present.

Objective: To introduce the student to the basic concepts, philosophies, and practices of the correctional system; to acquaint him or her with basic procedures of law, institutional discipline, and current correctional techniques as they apply to county-level institutions.

Instruction: Psychological and sociological considerations for the correctional officer; security procedures; correctional law; jail discipline; human behavior (including officer and inmate interaction); commitment procedures; elements of supervision; correctional policies and practices. The student must prepare a paper demonstrating a grasp of the concepts of the course and applying them to the corrections facility.

Credit recommendation: In the lower division baccalaureate/associate degree category, 3 semester hours in Introduction to Corrections (5/78). NOTE: Both Phases I and II must be completed to receive credit.

Hostage Negotiator's Seminar

Location: New York State Correctional Services Training Academy, 1134 New Scotland Road, Albany, NY.

Length: 73 hours (2 weeks); includes 24 hours of supervised practical application.

Dates: July 1977—Present.

Objective: To introduce correctional personnel to the art of hostage negotiation within the correctional setting, emphasizing the behavioral aspects of the hostage taker, negotiator, and hostage.

Instruction: Principles, techniques, and legal considerations of hostage negotiations; dynamics of human behavior; group dynamics; communications. Emphasis is on practical application of theoretical principles through role playing, simulation, and case studies. At the completion of the course, the student is required to submit a written report of an emergency plan for hostage negotiation developed for use at his or her facility.

Credit recommendation: In the lower division baccalaureate/associate degree category, 3 semester hours in Crisis Intervention, Psychology, or Sociology (5/78).

Management Laboratory

Location: New York State Correctional Services Training Academy, 1134 New Scotland Road, Albany, NY.

Length: 35 hours (1 week).

Dates: July 1973—Present.

Objective: To enable students to identify a variety of leadership styles and to acquaint them with some basic theories of motivation.

Instruction: Group dynamics; organizational development. Focus of instruction is on the completion of a number of inventory instruments including Blake's Managerial Grid, Profile on Approaches to Communications, Personnel Relations Survey, and Correctional Policy Inventory. Results of the inventories are discussed privately with each student and recommendations are made to identify and maximize the individual's strengths as a corrections administrator. (Prerequisite: Introduction to Administration, or Introduction to Management, or Organizational Development.)

Credit recommendation: In the lower division baccalaureate/associate degree category, 1 semester hour in Administration, Management, or Organizational Development (5/78).

NEW YORK STATE DEPARTMENT OF CORRECTIONAL SERVICES

Labor Contract Administration

Location: New York State Correctional Services Training Academy, 1134 New Scotland Road, Albany, NY.

Length: 45 hours (1 week).

Dates: February 1978—Present.

Objective: To improve management's understanding and knowledge of contract administration, employee discipline, and grievance handling in the public sector.

Instruction: Implementing an employer's labor relations policy; management's role in contract administration; development and enforcement of performance standards; purpose and operation of grievance procedures; grievance case preparation and investigation; grievance resolution; preparing and litigating arbitration cases. The lecture-discussion method is used, along with video taping and role playing.

Credit recommendation: In the lower division baccalaureate/associate degree category, 3 semester hours in Correction Administration, Criminal Justice, Labor Economics, Personnel Management, or Public Administration (3/78).

NEW YORK STATE DIVISION OF SUBSTANCE ABUSE SERVICES

Assessment Interviewing for Treatment Planning

Location: Training sites throughout New York State: Albany, Buffalo, Islip, New York City, Rochester, Syracuse, White Plains.

Length: 32 hours (4 days).

Dates: January 1976—Present.

Objective: To provide counselors with a systematic approach to assessment interviewing and developing treatment plans.

Instruction: The focused interview as a basis for information gathering and client assessment; interviewing skills; case histories; recording; treatment planning. Introduces confidentiality and psychometric testing. Lecture, discussion, video tapes, and small-group method are used.

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 2 semester hours in Behavioral Science, Human Services, or Social Work (12/77).

Basic Issues in the Treatment of Women Substance Abusers

Location: Training sites throughout New York State.

Length: 16 hours (2 days).

Dates: December 1977—Present.

Objective: To provide participants with an overview of the issues and problems of women and, in particular, how the understanding of these matters can facilitate the counseling process.

Instruction: Awareness of the counselor's attitudes about women, with specific reference to women addicts; the influence of those attitudes on treatment; current modalities in women's treatment; particular needs and problems of women in treatment. Methodology includes experiential exercises, self-instruction materials, discussions, slide presentations, and selected readings in current research.

Credit recommendation: In the lower division baccalaureate/associate degree category, 1 semester hour in Behavioral Science, Human Services, or Social Work (12/77).

Basic Management Skills

Location: Training sites throughout New York State: Albany, Buffalo, Islip, New York City, Rochester, Syracuse, White Plains.

Length: 40 hours (5 days).

Dates: October 1977—Present.

Objective: To provide an understanding of the manager's role in an organization and of the principles of effective and efficient management.

Instruction: The manager's job; management theory; the systems approach; the planning process; basic management functions; service unit costing; substance abuse program assessment; information gathering and decisionmaking; personnel issues; cost-saving measures; delegation of responsibility and authority. Lectures, discussion, case studies, and small-group method are used.

Credit recommendation: In the upper division baccalaureate category, 3 semester hours in Behavioral Science, Human Resources, Management, Social Work, or Urban Studies (12/77).

Counselor Training: Short-Term Client Systems

Location: Training sites throughout New York State: Albany, Buffalo, Islip, New York City, Rochester, Syracuse, White Plains.

Length: 40 hours (5 days).

Dates: May 1976—Present.

Objective: To provide counselors with an understanding of, and practice in, counseling techniques.

Instruction: The essential components of the helping relationship: establishing rapport and trust; hearing and responding to affective and cognitive data; exploring values and attitudes; initiating the problem-solving process. Emphasizes the development of counseling skills through lecture, discussion, and actual counseling sessions under the guidance of trainers.

Credit recommendation: In the upper division baccalaureate category, 2 semester hours in Behavioral Science, Human Services, or Social Work (12/77).

Overview of Substance Abuse

Location: Training sites throughout New York State.

Length: 24 hours (3 days).

Dates: December 1977—Present.

Objective: To provide a basic understanding of the varieties of drugs available, and their use and abuse.

Instruction: Overview of the history of substance abuse; psychopharmacology; the social, cultural, and individual factors affecting substance abuse. Films and self-instructional materials are used.

Credit recommendation: In the lower division baccalaureate/associate degree category, 1 semester hour in Behavioral Science or Social Science (12/77).

Preparing the Ex-Addict for Employment

(Offered in cooperation with Provide Addict Care Today, Inc./National Association on Drug Abuse Problems, Inc.)

Location: Various corporate training facilities in New York City.

Length: 18 hours (6 weeks).

Dates: December 1977—Present.

Objective: To provide participants with an understanding of basic concepts in vocational rehabilitation, especially as they relate to ex-addict clients.

Instruction: Introduction to the vocational rehabilitation process, including the role of the counselor; review of case histories and treatment plans; hiring practices in various types of businesses in New York City; legal issues in vocational rehabilitation counseling with drug abuse clients. Use of guest lecturers, group discussions, and role playing.

Credit recommendation: In the lower division baccalaureate/associate degree category, 1 semester hour in Behavioral Science, Human Services, or Social Work (12/77).

Puerto Rican History and Culture Workshop—An Overview

Location: Training sites throughout New York State.

Length: 16 hours (2 days).

Dates: December 1977—Present.

Objective: To provide a basic introduction to Puerto Rican history and culture, with a focus on specific concerns in the treatment of Puerto Rican clients.

Instruction: Examination of the Indian, African, and Spanish heritage in the formation of the Puerto Rican nation; patterns of migration; the culture, family structure, and employment patterns of Puerto Ricans in the United States; problems and issues involved in dealing with Puerto Rican substance abusers. Use of lectures, group discussions, films, and case histories.

Credit recommendation: In the lower division baccalaureate/associate degree category, 1 semester hour in Social Science (12/77).

Training of Trainers

Location: Training sites throughout New York State: Albany, Buffalo, Islip, New York City, Rochester, Syracuse, White Plains.

Length: 40 hours (5 days).

Dates: June 1976—Present.

Objective: To provide trainers experienced in the substance abuse field with additional knowledge in training theories and design and in the use of laboratory methods.

Instruction: Self-assessment of design and delivery skills, and of personal learning styles; learning theory; training design; techniques for presenting information; dynamics of group process; assessment of group learning situations. Lectures and discussion are used with emphasis on small-group experiences.

Credit recommendation: In the upper division baccalaureate category, 2 semester hours in Behavioral Science, Education, Human Services, or Social Work (12/77).

Vocational Rehabilitation in the Treatment Setting

Location: Training sites throughout New York State: Albany, Buffalo, Islip, New York City, Rochester, Syracuse, White Plains.

Length: 45 hours (5 days).

Dates: January 1976—Present.

Objective: To increase the counselor's understanding of vocational rehabilitation as it relates to substance abusers.

Instruction: Role and function of vocational rehabilitation specialists; development of skills in assessing client needs; providing guidance, support, and follow-up; problem identification and action planning. Lectures, video tapes, and discussions are used.

Credit recommendation: In the upper division baccalaureate category, 3 semester hours in Behavioral Science, Human Services, or Social Work (12/77).

Women in Treatment

Location: Training sites throughout New York State: Albany, Buffalo, Islip, New York City, Rochester, Syracuse, White Plains.

Length: 32 hours (4 days).

Dates: August 1976—Present.

Objective: To enable counselors and supervisors in substance abuse treatment programs to work more effectively with women in substance abuse treatment programs by increasing their awareness of attitudes toward women and the influence of such attitudes on treatment.

Instruction: Myths and stereotypes about women; characteristics of the female addict; counselor-client interaction; treatment planning, design, and delivery; use of individual and group techniques and structured experiences in assisting women clients to achieve treatment goals. Lecture, discussion, simulations, and small-group method are used.

Credit recommendation: In the upper division baccalaureate category, 2 semester hours in Behavioral Science, Human Services, or Social Work (12/77).

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NEW YORK TELEPHONE COMPANY

Computer Technology Training Program

The Computer Technology Training Program was designed to offer professional "state of the art" training to all management personnel whose job responsibilities lie in the area of electronic data processing. In order to meet this objective, the Program is divided into five functional areas: Basic Programmer Training; Programming Services; System Development; "User" Training; and Operations Training.

Source of official student records: The students' district office within the company.

Advanced FORTRAN Coding and Workshop (6068)

Location: Corporate Learning Center, 210 West 18th Street, New York, NY.

Length: 35 hours (1 week).

Dates: November 1976—Present.

Objective: To provide the student with the skills and knowledge necessary to utilize FORTRAN.

Instruction: Review of elementary FORTRAN concepts; extension of student's knowledge to include multi-dimensional arrays, functions, subroutines, and files. (Prerequisites: Computer Fundamentals for Managers 6064, FORTRAN IV Coding and Workshop 6034, and Introduction to Time-Sharing 6065, or the equivalent of these three courses.)

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 2 semester hours in Computer Technology or Data Processing (3/78).

Basic ANS COBOL Coding and Workshop (6074)

Location: Corporate Learning Center, 210 West 18th Street, New York, NY.

Length: 210 hours (6 weeks).

Dates: June 1971—Present.

Objective: To provide the student with the skills and knowledge needed to write ANS COBOL programs.

Instruction: Flow charting, coding, debugging, implementing, and documenting programs written in ANS COBOL. (Prerequisite: Introduction to Programming and IBM S/370 6072 or the equivalent.)

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 6 semester hours in Computer Technology or Data Processing (3/78).

Basic Assembler Language Coding (ALC) (6025)

Location: Corporate Learning Center, 210 West 18th Street, New York, NY.

Length: 119 hours (17 days).

Dates: July 1973—Present.

Objective: To provide the student with the skills and knowledge necessary to use IBM Assembler Language.

Instruction: Documenting and coding Assembler Language programs and subprograms using standard and decimal instructions; using the program listing and storage dump as debugging aids; writing programs and subprograms that are to be combined with other program modules, using standard conventions for linkage and passing data; using appropriate reference materials and manuals as required.

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 6 semester hours in Computer Technology or Data Processing (3/78).

Basic OS—JCL and Utilities for Operations Support (6030)

Refer to Operating Systems Applications.

Basic OS Utilities Workshop (6023)

Refer to IBM OS—JCL and Utilities.

Basic PL/I Coding and Workshop (6067)

Location: Corporate Learning Center, 210 West 18th Street, New York, NY.

Length: 84 hours (12 days).

Dates: October 1974—Present.

Objective: To provide the student with the skills and knowledge necessary to use PL/I.

Instruction: Data attributes; STREAM and RECORD I/O; control statements; procedures; structures; arrays; allocation of storage; preprocessing; use and coding of internal and external subroutines and functions.

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 4 semester hours in Computer Technology or Data Processing (3/78).

COBOL Core Debugging (6029)

Location: Corporate Learning Center, 210 West 18th Street, New York, NY.

Length: 28 hours (4 days).

Dates: August 1973—Present.

Objective: To provide the student with the skills and experiences necessary to debug programs at the machine level.

Instruction: Understanding and resolution of the ABENDS most commonly encountered by the COBOL programmer.

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 1 semester hour in Computer Technology or Data Processing (3/78).

Computer Fundamentals for Managers (6064)

Refer to Introduction to Programming.

Concepts of Systems Analysis and Design

1. Concepts of Total System Development (6070)

2. Project Management (6071)

Location: Corporate Learning Center, 210 West 18th Street, New York, NY.

Length: 1. 21 hours (3 days).
2. 35 hours (1 week).

Dates: 1. December 1976—Present.
2. June 1976—Present.

Objective: To provide the student with the fundamental concepts of systems analysis and design, and project management.

Instruction: **Course 1:** Using standard terminology to describe the Total System Development process; identifying and knowing when to apply the various specialized technical skills that may be required to support a systems development effort. **Course 2:** Application of a systems approach to project planning and control, including PERT/CPM and general network theory and techniques. (Prerequisite: Concepts of Total System Development 6070 or the equivalent.)

Credit recommendation: In the lower division baccalaureate/associate degree category, or in the upper division baccalaureate category, or in the graduate degree category, 3 semester hours in Computer Technology or Data Processing (3/78). NOTE: Courses 1 and 2 must both be completed to receive credit.

Concepts of Total System Development (6070)

Refer to Concepts of Systems Analysis and Design.

FORTRAN IV Coding and Workshop (6034)

Refer to Introduction to Programming.

IBM Information Management System (IMS/VS) Batch Programming (6048)

Location: Corporate Learning Center, 210 West 18th Street, New York, NY.

Length: 35 hours (1 week).

Dates: June 1977—Present.

Objective: To provide the student with the skills and knowledge necessary to effectively utilize IMS in a batch environment.

Instruction: IMS data base concepts; DL/1 Boolean logic and commands; secondary index structures. (Prerequisites: IMS/VS Overview 6047 or the equivalent, and either Basic ANS COBOL Coding and Workshop 6074, or Basic Assembler Language Coding (ALC) 6025, or Basic PL/I Coding and Workshop 6067, or the equivalent of one of these three courses.)

Credit recommendation: In the lower division baccalaureate/associate degree category, or in the upper division baccalaureate category, or in the graduate degree category, 2 semester hours in Computer Technology or Data Processing (3/78).

IBM Information Management System (IMS/VS) Teleprocessing Programming (6050)

Location: Corporate Learning Center, 210 West 18th Street, New York, NY.

Length: 35 hours (1 week).

Dates: June 1977—Present.

Objective: To provide the student with the skills and knowledge necessary to effectively utilize IMS in a teleprocessing environment.

Instruction: IMS message flow to/from a terminal; message processing vs. batch message processing; PCB's; Batch Terminal Simulation. (Prerequisite: IBM Information Management System (IMS/VS) Batch Programming 6048.)

Credit recommendation: In the lower division baccalaureate/associate degree category, or in the upper division baccalaureate category, or in the graduate degree category, 1 semester hour in Computer Technology or Data Processing (3/78).

IBM OS—JCL and Utilities

1. **Introduction to OS Job Control Language (JCL) (6020)**
2. **Basic OS Utilities Workshop (6023)**

Location: Corporate Learning Center, 210 West 18th Street, New York, NY.

Length: 1. 35 hours (1 week).
2. 35 hours (1 week).

Dates: 1. August 1973—Present.
2. June 1975—Present.

Objective: To provide the student with the skills necessary to run programs and use utilities.

Instruction: Course 1: Basic components of an Operating System; coding, testing, and debugging Job Control Language. (Prerequisite: Introduction to Programming and IBM S/370 6072 or the equivalent.) **Course 2:** Utilizing the Job Control Language and Program Control Language required to execute commonly used services provided by the OS Systems and Data Set Utility Programs; creating, using, and deleting generation data groups and data sets. (Prerequisites: Basic ANS COBOL Coding and Workshop 6074, Introduction to OS Job Control Language 6020, and Introduction to Programming and IBM S/370 6072, or the equivalent of these three courses.)

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 3 semester hours in Computer Technology or Data Processing (3/78). NOTE: Courses 1 and 2 must both be completed to receive credit.

Interactive Programming

1. **TSO for COBOL Programmers (6056)**
2. **TSO for PL/I Programmers (6075)**
3. **TSO/SPF for COBOL Programmers (6076)**

Location: Corporate Learning Center, 210 West 18th Street, New York, NY.

Length: 1. 35 hours (1 week).
2. 21 hours (3 days).
3. 35 hours (1 week).

Dates: 1. November 1974—Present.
2. January 1977—Present.
3. March 1977—Present.

Objective: To provide the student with the skills and experiences necessary to write and run programs in an interactive environment.

Instruction: Entering and manipulating data from the terminal; developing, compiling, and executing interactive programs; writing and executing TSO procedures.

Credit recommendation: Course 1, 2, or 3: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 1 semester hour in Computer Technology or Data Processing (3/78). NOTE: These courses cover substantially the same material. Credit should *not* be awarded to a student for more than one of the courses.

Introduction to Data Processing for Operations Support (6077)

Refer to Operating Systems Applications.

Introduction to OS Job Control Language (JCL) (6020)

Refer to IBM OS—JCL and Utilities.

Introduction to Programming

1. **Computer Fundamentals for Managers (6064)**
2. **Introduction to Time-Sharing (6065)**
3. **FORTRAN IV Coding and Workshop (6034)**
4. **Using Time-Sharing and Introduction to the BASIC Language (6066)**

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Location: Corporate Learning Center, 210 West 18th Street, New York, NY.

Length: 1. 21 hours (3 days).
2. 28 hours (4 days).
3. 35 hours (1 week).
4. 35 hours (1 week).

Dates: 1. August 1976—Present.
2. May 1975—Present.
3. March 1975—Present.
4. October 1975—Present.

Objective: To introduce the student to the fundamentals of computer programming with a high-level language.

Instruction: Course 1: Introduction to hardware and software; processing of data; elementary programming logic. **Course 2:** Time-sharing concepts and programming applications in BASIC. (Prerequisite: Computer Fundamentals for Managers 6064 or the equivalent.) **Course 3:** Continuing concepts of programming, including loops and single dimensional arrays using FORTRAN IV. (Prerequisites: Computer Fundamentals for Managers 6064 and Introduction to Time-Sharing 6065, or the equivalent of these two courses.) **Course 4:** Continuing concepts of programming, including loops and single dimensional arrays using BASIC. (Prerequisites: Computer Fundamentals for Managers 6064 and Introduction to Time-Sharing 6065, or the equivalent of these two courses.)

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 4 semester hours in Computer Technology or Data Processing (3/78). NOTE: Courses 1 and 2 and either 3 or 4 must be completed to receive credit. Credit is *not* recommended for a student who has already completed Introduction to Programming and IBM S/370 6072.

Introduction to Programming and IBM S/370 (6072)

Location: Corporate Learning Center, 210 West 18th Street, New York, NY.

Length: 70 hours (2 weeks).

Dates: January 1977—Present.

Objective: To provide the student with a sophisticated introduction to programming logic and a basic understanding of the IBM S/370.

Instruction: Number systems; hexadecimal and binary arithmetic; internal and external data representation; OS/VS concepts overview; external storage concepts; introduction to S/370 machine language; programming logic.

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 3 semester hours in Computer Technology or Data Processing (3/78). NOTE: Credit is *not* recommended for a student who has already completed the Introduction to Programming sequence of courses 6064, 6065, and either 6034 or 6066.

Introduction to Time-Sharing (6065)

Refer to Introduction to Programming.

Operating Systems Applications
1. Introduction to Data Processing for Operations Support (6077)
2. Basic OS—JCL and Utilities for Operations Support (6030)
3. OS Utilities for Operations Support (6031)

Location: Corporate Learning Center, 210 West 18th Street, New York, NY.

Length: 1. 70 hours (2 weeks).
2. 35 hours (1 week).
3. 35 hours (1 week).

Dates: 1. July 1977—Present.
2. June 1973—Present.
3. June 1973—Present.

Objective: To provide the student with the skills and knowledge necessary to utilize IBM OS/VS effectively.

Instruction: Course 1: Overview of hardware and operational processing; objectives and purposes of operating systems; JCL fundamentals and use. **Course 2:** JCL with extensive application; accessing, interpreting, and utilizing systems control and data control information. Case problems and machine exercises are used extensively. (Prerequisite: Introduction to Data Processing for Operations Support 6077 or the equivalent.) **Course 3:** Construction of procedures; systems maintenance; data set manipulation. Case problems and machine exercises are used extensively. (Prerequisites: Basic OS—JCL and Utilities for Operations Support 6030 and Introduction to Data Processing for Operations Support 6077, or the equivalent of these two courses.)

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 4 semester hours in Computer Technology or Data Processing (3 lecture, 1 laboratory) (3/78). NOTE: Courses 1, 2, and 3 or Course 3 and the equivalents of Courses 1 and 2 must be completed to receive credit.

OS Utilities for Operations Support (6031)

Refer to Operating Systems Applications.

Programmer Productivity Techniques (6069)

Location: Corporate Learning Center, 210 West 18th Street, New York, NY.

Length: 35 hours (1 week).

Dates: August 1976—Present.

Objective: To provide the student with the techniques necessary to design structured programs.

Instruction: Decomposing problems and designing programs using HIPO; representing a program's logic in pseudo-English.

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 1 semester hour in Computer Technology or Data Processing (3/78).

Project Management (6071)

Refer to Concepts of Systems Analysis and Design.

TSO for COBOL Programmers (6056)

Refer to Interactive Programming.

TSO for PL/I Programmers (6075)

Refer to Interactive Programming.

TSO/SPF for COBOL Programmers (6076)

Refer to Interactive Programming.

Using Time-Sharing and Introduction to the BASIC Language (6066)

Refer to Introduction to Programming.

PEPSI-COLA COMPANY
PEPSI-COLA MANAGEMENT INSTITUTE

Pepsi-Cola Company, a division of PepsiCo Inc., based in Purchase, New York, is primarily engaged in the development, manufacturing, and marketing of soft drink products through a nationwide network of franchise and company-owned bottling facilities. Pepsi-Cola Company and its company-owned bottling plants employ approximately 6,500 people.

Pepsi-Cola Management Institute's primary function is to provide ongoing management seminars and educational television training programs for Pepsi-Cola bottlers in the United States and internationally. The management seminars are conducted in most major cities with participants from all geographic areas in attendance.

Source of official student records: Registrar, Pepsi-Cola Management Institute, Anderson Hill Road, Purchase, New York 10577.

Basic Financial Concepts (Basic Accounting)

Location: Various locations throughout the United States.

Length: 28 hours (4 days); residential.

Dates: August 1977—Present.

Objective: To provide an understanding of financial reports and data as they are used in management decisions.

Instruction: Concepts and methods underlying financial statements; interpretation of a balance sheet and income statement; interpretation of a statement of changes in a financial statement; financial statement analysis; budgeting process; nature of fixed and variable costs; break-even concepts and analysis.

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 2 semester hours in Accounting (8/77).

Coordinating the Marketing and Production Functions of the Franchise

Location: Various locations throughout the United States.

Length: 21 hours (3 days); residential.

Dates: August 1977—Present.

Objective: To improve understanding and communication between marketing/sales and production/warehousing personnel.

Instruction: Simulation case study involving the relationship between marketing and production.

Credit recommendation: In the upper division baccalaureate category, 1 semester hour in General Management or Marketing (8/77).

Distribution Management

Location: Various locations throughout the United States.

Length: 21 hours (3 days); residential.

Dates: August 1977—Present.

Objective: To provide an understanding of the overall importance of distribution and the economic benefits of effective distribution management.

Instruction: Overview of distribution; distribution costs; profit leverage; load forecasting; personnel considerations; sales and merchandising execution; human needs and motivation; compensation systems; vehicle routing; distribution equipment; computer applications.

Credit recommendation: In the upper division baccalaureate category, 1 semester hour in Marketing (8/77).

Dynamics of Warehouse Operations

Location: Various locations throughout the United States.

Length: 21 hours (3 days); residential.

Dates: August 1977—Present.

Objective: To provide an understanding of the basic concepts of materials handling.

Instruction: Objectives of materials handling; understanding distribution centers; flow of materials; analysis of marketing data; materials handling equipment; inventory control; utilization and layouts of distribution centers.

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 1 semester hour in Industrial Engineering or Operations Management (8/77).

Financial Decisionmaking

Location: Various locations throughout the United States.

Length: 28 hours (4 days); residential.

Dates: August 1977—Present.

Objective: To provide an understanding of cost accounting as a tool of financial decisionmaking.

Instruction: Full absorption costing; break-even analysis; determining marginal contribution; direct costing in decisionmaking; conversion to direct costing; relevant costs in decisionmaking; capital investment planning; comprehensive financial planning.

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 2 semester hours in Cost Accounting (8/77).

Franchise Opportunities Through Market Research
(Observational Techniques in Market Research)

Location: Various locations throughout the United States.

Length: 14 hours (2 days); residential.

Dates: August 1977—Present.

Objective: To provide an understanding of observational techniques in market research.

Instruction: Selecting the observational unit; collecting data; tabulating results; report preparation and presentation.

Credit recommendation: In the upper division baccalaureate category, 1 semester hour in Marketing (8/77).

Introduction to Management

Location: Various locations throughout the United States.

Length: 30 hours (4 days); residential.

Dates: August 1977—Present.

Objective: To develop an understanding of the underlying principles and concepts related to the management process and managerial behavior.

Instruction: Practical basics of management, including problem solving, motivating for results, communications skills, team building, and leadership skills.

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 2 semester hours in Management (8/77).

Management by Objectives

Location: Various locations throughout the United States.

Length: 21 hours (3 days); residential.

Dates: August 1977—Present.

Objective: To provide an understanding of the managerial process called management by objectives.

Instruction: MBO as a management philosophy; management as a system; the goal-setting process in MBO; relating objectives to key areas of responsibility; developing action plans.

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 1 semester hour in Management (8/77).

Marketing Soft Drinks to the Supermarket Industry
(Marketing to Retailers)

Location: Various locations throughout the United States.

Length: 35 hours (5 days); residential.

Dates: August 1977—Present.

Objective: To provide an understanding of the merchandising strategies involved in marketing to retailers.

Instruction: Structure and functions of retail management; developing and presenting marketing campaigns to retailers; emerging issues in retailing.

Credit recommendation: In the upper division baccalaureate category, 3 semester hours in Marketing (8/77).

The People Program: Individual Development

Location: Various locations throughout the United States.

Length: 35 hours (1 week); residential.

Dates: August 1977—Present.

Objective: To develop the personal insights, attitudes, and skills to enable the manager to resolve problems that occur in the work setting.

Instruction: Using the workshop approach, students explore all aspects of people relationships in the work settings, as well as the workshop setting itself. Emphasis is on the practical "people problems" of the job, dealing with communication styles, problem diagnosis and resolving face-to-face conflicts. The individual's influence and power in his or her organization is explored as part of his or her management impact.

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 2 semester hours in Behavioral Aspects of Management (8/77).

Plant Operations Management

Location: Various locations throughout the United States.

Length: 35 hours (5 days); residential.

Dates: November 1977—Present.

Objective: To provide an understanding of the concepts of sound plant operations management.

Instruction: Overview of the fundamentals of the corporate structure. Principles of efficient management, with emphasis on plants, materials, and people; the use of such management tools as work analysis, personnel motivation, work measurement, flow charts, control charts, and Gantt charts; establishing work standards.

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 2 semester hours in Operations Management (11/77).

Project Management

Location: Various locations throughout the United States.

Length: 21 hours (3 days); residential.

Dates: August 1977—Present.

Objective: To provide an overview of the history, philosophy, basic terminology, and selected techniques of project management.

Instruction: PERT; CPM; network analysis (deterministic and nondeterministic); PERT/Costs; analysis by simulation.

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 1 semester hour in Industrial Engineering, Management Science, or Operations Management (8/77).

1. Promotion Profitability
2. Sales Forecasting
(Sales Promotion and Forecasting)

Location: Various locations throughout the United States.

Length: 1. 14 hours (2 days); residential.
2. 14 hours (2 days); residential.

Dates: August 1977—Present.

Objective: To provide an overview of sales promotion and forecasting in marketing to final consumers.

Instruction: Understanding and planning sales promotions; types of promotional tools; economics of promotions; promotional support activities; the role of sales forecasting; short-term and long-term forecasting; methods of forecasting; problems in forecasting; improving forecasting.

Credit recommendation: In the upper division baccalaureate category, 2 semester hours in marketing (8/77). NOTE: Courses 1 and 2 must both be completed to receive credit.

Sales Forecasting

Refer to Promotion Profitability.

PORT AUTHORITY OF NEW YORK AND NEW JERSEY—WORLD TRADE INSTITUTE

Maritime Law

Location: One World Trade Center, New York, NY.

Length: 30 hours (12 weeks).

Dates: May 1977—Present.

Objective: To present the student with an overview of maritime law.

Instruction: History of maritime law; claims—development and formalities; bills of lading under C.O.G.S.A.; charter party obligations; collision, including cargo and hull liability; freight terminology—demurrage, dispatch and laytime; salvage rules; speed deficiencies, coverage under P. & I. protection; H. & M. insurance; York-Antwerp rules; personal injury claims; arbitration vs. court determination; unseaworthiness; the Jones Act.

Credit recommendation: In the upper division baccalaureate category or in the graduate degree category, 2 semester hours in Maritime Law (5/77).

SOUTHERN NEW ENGLAND TELEPHONE COMPANY

The Southern New England Telephone Company provides communication facilities and services to over 1,500,000 customers in the State of Connecticut. The Company employs approximately 12,000 persons, and is part of the nationwide Bell System. Communication services include facilities for the transmission and switching of voice, data, and television messages between people and/or machines.

The Company conducts training in several disciplines for the technical, administrative, and managerial development of its employees. Courses are task-oriented, as well as academic. The major focus is upon skills and knowledge relevant to the employee's job. Some courses are developed locally, while others are the product of a larger Bell System effort.

Employees are released from other work responsibilities while attending instructor-led and required self-paced courses. Some correspondence type (self-paced) courses are voluntary.

Source of official student records: Network Manager—Technical Manpower Development, Engineering Training Center, Room 503, 310 Orange Street, New Haven, Connecticut 06506.

Engineering Economy

Location: Engineering Training Center, 310 Orange Street, New Haven, CT.

Length: 70 hours (2 weeks).

Dates: May 1977—Present.

Objective: To provide methods of evaluating alternative courses of action regarding the economic aspects of engineering decisions.

Instruction: Time value of money; financing; capital costs, including income tax effects; plant operating costs; present worth of equivalent annual costs; replacement/retirement; capital utilization criteria; rate of return. A complex computer-based case study is used to apply the concepts presented.

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 3 semester hours in Engineering Economy (12/77).

Engineering Mathematics (E200)

Location: Engineering Training Center, 310 Orange Street, New Haven, CT.

Length: 35 hours (5 weeks).

Dates: May 1972—Present.

Objective: To provide the student with basic mathematical skills to be used in solving engineering problems.

Instruction: Fractions; algebra; logarithms; trigonometry; vectors; numbering systems; probability; statistics.

Credit recommendation: In the lower division baccalaureate/associate degree category, 2 semester hours in Mathematics (12/77).

Number One ESS (Electronic Switching Systems) Method of Operation

Location: Engineering Training Center, 310 Orange Street, New Haven, CT.

Length: 35 hours (1 week).

Dates: December 1977—Present.

Objective: To provide an overview of computer applications in a switching system.

Instruction: Basic introduction to the terminology, organization, and operation of the Electronic Switching System; an overview of the various components of the system and their functions, including call processing, traffic measurement, and service order arrangements; the location of the components on the system block diagram.

Credit recommendation: In the lower division baccalaureate/associate degree category, 1 semester hour in Computer Applications (12/77).

ENGINEERING FUNDAMENTALS

The courses listed below make up the Engineering Fundamentals Program, which is self-paced, programmed instruction. The units in the program have been grouped together in order to establish appropriate credit recommendations. While credit recommendations have been made for the two separate groups of units, when awarding credit particular consideration should be given to those who have completed the total program.

Basic Logic (E230)

Refer to Electrical Engineering Principles.

Basic Transmission Principles (E280)

Refer to Electrical Engineering Principles.

Codes and Coding (E220)

Refer to Engineering Mathematics.

Computer Concepts (E250)

Refer to Electrical Engineering Principles.

Electrical Engineering Principles

1. **Basic Logic (E230)**
2. **Basic Transmission Principles (E280)**
3. **Computer Concepts (E250)**
4. **Electrical Engineering Principles (E260)**
5. **Information Principles (E240)**

Location: Administered from Engineering Training Center, 310 Orange Street, New Haven, CT.

Length: Independent study.

Dates: December 1977—Present.

Objective: To provide the student with an introduction to electrical engineering principles.

Instruction: Basic physical concepts; direct current circuits; alternating current circuits; DC & AC measurements; introduction to electronics; logic; computer concepts; wave shaping; transmission lines; signal processing.

Credit recommendation: In the lower division baccalaureate/associate degree category, 2 semester hours in Electrical Technology (12/77).

Electrical Engineering Principles (E260)

Refer to Electrical Engineering Principles.

Engineering Mathematics

1. **Codes and Coding (E220)**
2. **Mathematics (E200)**
3. **Numbering Systems (E210)**
4. **Statistics and Probability (E270)**

Location: Administered from Engineering Training Center, 310 Orange Street, New Haven, CT.

Length: Independent study.

Dates: December 1977—Present.

Objective: To provide the student with basic mathematical skills to be used in solving engineering problems.

Instruction: Fractions; algebra; logarithms; trigonometry; vectors; numbering systems; probability; statistics.

Credit recommendation: In the lower division baccalaureate/associate degree category, 1 semester hour in Mathematics (12/77).

Information Principles (E240)

Refer to Electrical Engineering Principles.

Mathematics (E200)

Refer to Engineering Mathematics.

Numbering Systems (E210)

Refer to Engineering Mathematics.

Statistics and Probability (E270)

Refer to Engineering Mathematics.

TEXACO INC.

Texaco Inc. is engaged in the worldwide production, refining, and marketing of crude oil and its products, including petrochemicals. At year end 1977, Texaco remained one of the largest industrial corporations in the United States, with total assets of nearly $19 billion. Texaco shareholders number more than 413,600, and some 70,600 individuals are employed by the company throughout the world.

The Manpower Planning and Development unit offers administrative and clerical training in universally needed skills to employees throughout the company. Approximately 1,000 employees benefit from the training services of the Manpower Planning and Development unit each year. The 23 individual departments within Texaco are responsible for skills training in their own specialized fields, such as accounting, marketing, and refining.

Source of official student records: Training Manager, Personnel and Corporate Service, Texaco Inc., 2000 Westchester Avenue, White Plains, New York 10650.

Advanced Management Development

Location: Various Texaco training facilities.

Length: 54 hours (8 days); residential.

Dates: August 1977—Present.

Objective: To provide the student with the opportunity to apply fundamental management principles through case studies.

Instruction: The following topics are treated through an extensive use of case studies: planning; organizing; motivating; controlling; job enrichment and enlargement; the behavioralists; management sciences; social responsibilities of business; ecology; legal environment of business; labor relations; communications and information flow.

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 4 semester hours in Management (2/78).

Leadership Skills

Location: Various Texaco training facilities.

Length: 32 hours (4 days); residential.

Dates: October 1976—Present.

Objective: To provide an understanding of basic supervisory principles and techniques for new managers.

Instruction: Leadership; knowing your employees' individual differences; understanding personality and behavior; communication; discipline; handling complaints and grievances; guiding and developing employees; job satisfaction and morale. Use of programmed instructional material, case studies, and post-assignment readings.

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 2 semester hours in Management (2/78).

Management Development

Location: Various Texaco training facilities.

Length: 40 hours (1 week); residential.

Dates: August 1977—Present.

Objective: To provide an introduction to the principles and practices of management.

Instruction: Planning; organizing; motivating through leadership, human relations, communications, and instruction and development; controlling. Use of in-basket exercises, case studies, and post-assignment readings. (Prerequisite: Leadership Skills.)

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 3 semester hours in Management (2/78).

Personnel Management

Location: Various Texaco training facilities.

Length: 72 hours (2 weeks); residential.

Dates: October 1976—Present.

Objective: To provide an overview of the behavioral aspects of managing an organization.

Instruction: Managing change; coaching and counseling; managing results; performance evaluation; communications; behavior modification; time management; motivation; team building and conflict management; negotiations and influence; leadership; self-development. Teaching approaches include group discussions, practical exercises, and case study analyses. (Prerequisite: Advanced Management Development.)

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 4 semester hours in Behavioral Aspects of Management (2/78).

UNITED CEREBRAL PALSY ASSOCIATIONS OF NEW YORK STATE, INC.

United Cerebral Palsy Associations of New York State is a voluntary health agency which serves as a central, statewide organization to provide assistance to local affiliates dealing with the problems of cerebral palsy and other developmental disabilities. The Association plans, promotes, and assists in the establishment, maintenance, and operation of training centers, educational facilities, rehabilitation facilities, and other clinics throughout the State.

The Association provides inservice training and education to its professional and nonprofessional staff, conducts seminars throughout the State in all aspects of the developmental disability field, and, under contract with the New York State Department of Mental Hygiene, provides inservice training to direct-care personnel at several developmental centers.

Source of official student records: Director, Program Services, United Cerebral Palsy Associations of New York State, Inc., 815 Second Avenue, New York, New York 10017.

Anatomy and Physiology of the Speech Mechanism

Location: Locations in New York City: Brooklyn Developmental Center; Nina Eaton Center; Willowbrook Developmental Center; UCPA classrooms.

Length: 42 hours (14 weeks).

Dates: January 1978—Present.

Objective: To provide the student with a comprehensive understanding of oroneuromotor development and respiratory function under normal and pathological conditions; to enable the student to clinically apply assessment skills specific to orofacial pathology and relative to a developmentally disabled population.

Instruction: Musculature of the speech mechanism (orofacial, thoracic, and abdominal), including origins and insertions, function, and innervation; orofacial kinesiology as it relates to sucking, swallowing, chewing, and facial expression; stages in normal oroneuromotor maturation and the influence of cerebral palsy and other neuromotor disabilities; relationships between respiratory-phonatory-articulatory mechanisms during speech production; function of the respiratory system during vegetative and speech breathing; influences of abnormal muscle tone on the respiratory-phonatory-articulatory complex; craniofacial anomalies and their influence on oromotor function; components of the peripheral speech mechanism examination and implications of findings; components of neurodevelopmental assessment and the formulation of basic treatment needs; physiologic requirements for phoneme production; language developmental stages (phonalogy, syntax, and semantics); discussion and application of theories supporting motokinesthetic therapy; rationale and application of myofunctional therapy to the handicapped population; literature concerning central mechanisms controlling linguistic functions.

Credit recommendation: In the graduate degree category, 3 semester hours in Allied Health Sciences or Developmental Disabilities (9/77).

An Integrated Neurophysiological Approach Toward Management of an Institutionalized Multiple-Handicapped Population

Location: Locations in New York City: Brooklyn Developmental Center; Nina Eaton Center; Willowbrook Developmental Center; UCPA classrooms.

Length: 75 hours (15 weeks).

Dates: January 1978—Present.

Objective: To enable the student to develop skill in assessment and treatment/program planning for an institutionalized multiple-handicapped population using an interdisciplinary team.

Instruction: Interdisciplinary assessment of a developmentally disabled individual and planning a multi-disciplined program. Integration of theoretical approaches, professions, and residents; rules of stimulation and response; autonomic nervous system; oral motor development, dysfunction, and feeding problems; motion as stimulation; muscles, joints, posture, and movement; perceptual development; sensory motor integration. The course includes classroom lecture/discussion and laboratory sessions.

Credit recommendation: In the graduate degree category, 3 semester hours in Allied Health Sciences or Developmental Disabilities (9/77).

Management of the Blind and Partially Sighted

Location: Locations in New York City: Brooklyn Developmental Center; Nina Eaton Center; Willowbrook Developmental Center; UCPA classrooms.

Length: 34 hours (15 weeks).

Dates: January 1978—Present.

Objective: To provide the student with an understanding of the normal and abnormal physiological processes of the eye, and to provide the skills necessary to rehabilitate the blind or visually handicapped in society.

Instruction: Physiological and sociological problems of the blind in society, anatomy and physiology of the eye; eye disorders (etiology, pathology, and treatment); orientation and mobility skills; analysis of the components of an activity and their adaptation to the blind population; adaptive aids in communication, mobility, and personal care; communication skills, Federal, State, and local legislation and regulations.

Credit recommendation: In the lower division baccalaureate/associate degree category, 2 semester hours in Allied Health Sciences or Developmental Disabilities (9/77).

1. Normal Growth and Development (Baccalaureate Level)

2. Normal Growth and Development (Graduate Level)

Location: Locations in New York City: Brooklyn Developmental Center; Nina Eaton Center; Willowbrook Developmental Center; UCPA classrooms.

Length: 75 hours (15 weeks).

Dates: January 1978—Present.

Objective: Course 1: To provide the student with a basic understanding of normal growth and development as it pertains to factors interfering with development. **Course 2:** To provide the student with advanced concepts of normal growth and development and the ability to use them in dealing with the developmentally disabled.

Instruction: Developmental stages (sensorimotor interrelationships and causative factors of interference); neurological basis of movement; evolution of voluntary movement; reflexive substrata (normal reflexive development); equilibrium reactions (developmental stages, components, and assessment); control of movement; components, stages, assessment, and remediation of sensorimotor integration; components and stages of speech and cognitive development; current issues in the study of normal development. Both courses include classroom lecture/discussion, laboratory sessions, and a case study report. (Prerequisite for Course 2: baccalaureate degree in a related health specialty.)

Credit recommendation: Course 1: In the upper division baccalaureate category, 3 semester hours in Allied Health Sciences or Developmental Disabilities (9/77). **Course 2:** In the graduate degree category, 3 semester hours in Allied Health Sciences or Developmental Disabilities (9/77).

Normal Growth and Development (Graduate Level)

Refer to Normal Growth and Development (Baccalaureate Level).

UNITED NEW YORK AND NEW JERSEY SANDY HOOK PILOTS' ASSOCIATION

PILOT TRAINING PROGRAM

Ship Operation and Management Laboratory (06L)

Location: Sandy Hook Pilot School, Staten Island, NY.

Length: 156 weeks (3 years); 6 days, or approximately 72 hours, out of each 9-day period.

Dates: January 1978—Present.

Objective: To supplement formal classroom instruction with practical shipboard experience in order to promote an understanding of shipboard organization and operation.

Instruction: During each six days aboard ship, the student's time is spent in watchstanding, ship maintenance and repair, and practical learning experiences provided in the following areas: watchstanding underway at sea; drills and exercises in ship maneuvering; abandon ship; fire drills; rules of the road; deck seamanship; navigation (at least six structured real-life problems); meteorology; ship construction; marine engineering (deck); and communications. The student completes a workbook of exercises relating to the above areas.

Credit recommendation: In the lower division baccalaureate/associate degree category, 4 semester hours in Navigation and Nautical Science, and in the upper division baccalaureate category, 8 semester hours in Navigation and Nautical Science (11/77). NOTE: All three years of sea cruise training must be completed to receive credit.

UNITED STATES PUBLIC HEALTH SERVICE HOSPITAL — STATEN ISLAND, NEW YORK

PHYSICIAN'S ASSISTANT TRAINING PROGRAM

The Physician's Assistant Training Program was established in 1968. Its major purpose is to provide competent assistants to the primary care practitioner who can function effectively in a wide variety of practice settings. The overall objectives of the Program are:

- To acquaint the student with fundamentals of proper management of illness and injuries.
- To impart to the student not only the "methods" of treatment and procedures but also the "rationale."
- To provide the student with the ability to deal with emergencies and minimize complications and suffering.
- To broaden the student's capacity for understanding the complexities of the human body and its response to disease.
- To acquaint the student with his/her limitations in the field of medicine.

The Physician's Assistant Training Program consists of 24 months of training, during which students attend 10 months of classroom lectures and spend the remaining time in clinical rotations under the guidance of a physician preceptor. During the clinical phase, students also attend staff conferences and case presentations.

This Program is accredited by the Council on Medical Education of the American Medical Association and is approved by the New York State Board of Medicine. Each of its graduates is eligible for registration in the State of New York as a Registered Physician's Assistant (R.P.A.) and is eligible to sit for the National Certifying Examination for Assistants to Primary Care Physicians that leads to designation as a "Physician's Assistant-Certified (P.A.-C)."

Source of official student records: Program Director, Physician's Assistant Training Program, U.S. Public Health Service Hospital, Bay Street and Vanderbilt Avenue, Staten Island, New York 10304.

Anatomy and Physiology

(Taught as separate courses prior to September 1976)

Location: U.S. Public Health Service Hospital, Bay Street and Vanderbilt Avenue, Staten Island, NY.

Length: 135 hours (10 months).

Dates: September 1974—Present.

Objective: To provide an elementary knowledge of the structures and functions of the human body as a background for studying medical and surgical conditions.

Instruction: The structure and function of the human body. Basic overview of integumentary, musculoskeletal, circulatory, endocrine, digestive, respiratory, excretory, nervous, and reproductive systems. No laboratory experience is included.

Credit recommendation: In the lower division baccalaureate/associate degree category, 6 semester hours in Basic Science (Anatomy, Physiology) (12/77).

1. Anesthesia
2. Clinical Pharmacology
3. Dietetics

Location: U.S. Public Health Service Hospital, Bay Street and Vanderbilt Avenue, Staten Island, NY.

Length: 1. 5 hours (10 months).
2. 90 hours (10 months).
3. 12 hours (10 months).

Dates: September 1974—Present.

Objective: To provide an understanding of general and specific concepts of medical pharmacology and pharmacodynamics.

Instruction: **Course 1:** Definition, classification, and types of anesthesia; the mechanisms of local and topical anesthesia, and the rationale for their use; the stages of anesthesia. **Course 2:** Chemical compounds used to diagnose and treat human disease; the basic structures, mechanisms of action, interactions, outstanding adverse reactions, and uses of drugs in the human body. The organization of the course follows the systems framework: integumentary, musculoskeletal, head and neck, respiratory, cardiovascular, neurological, endocrine, gastrointestinal, and genitourinary. **Course 3:** Evaluation of patient's needs in reference to specific culture, psychological influences, physical condition, and ability to learn; elements of good nutrition; effect of poor nutrition on the body; description of proper diets indicated for all diet-influenced pathological conditions.

Credit recommendation: In the upper division baccalaureate category, 6 semester hours in Science (Clinical) (12/77).

Cardiopulmonary Resuscitation

Refer to Medicine.

Clinical Chemistry/Clinical Laboratory

Location: U.S. Public Health Service Hospital, Bay Street and Vanderbilt Avenue, Staten Island, NY.

Length: 38½ hours (10 months).

Dates: September 1974—Present.

Objective: To provide an understanding of the concepts of clinical laboratory experience.

Instruction: Interpretation and evaluation of normal and abnormal values of clinical chemistry determinations that are useful in formulating a diagnosis and in monitoring a patient's status. Demonstration of basic laboratory procedures, including CBC, urinalysis, and gram stain.

Credit recommendation: In the lower division baccalaureate/associate degree category, 2 semester hours in Science (Elective) (12/77).

Clinical Pharmacology

Refer to Anesthesia.

Clinical Practice

Location: U.S. Public Health Service Hospital, Bay Street and Vanderbilt Avenue, Staten Island, NY.

Length: 2,080 hours (52 weeks).

Dates: September 1974—Present.

Objective: To provide students with supervised experiential training in patient care in a variety of medical specialities.

Instruction: Students are assigned to a series of physician preceptors on a one-to-one basis for a 52-week period, during which they rotate through medicine, surgery, pediatrics, and obstetrics/gynecology as well as a number of medical and surgical subspecialties (radiology, psychiatry, dermatology, family practice, orthopedics, and urology). Students participate in all rounds, conferences and seminars, and participate fully in the daily work of the service to which they are assigned. Students attend, and participate in, a twice-weekly clinical presentation supervised by the Medical Program Director; attend, and participate in, clinics and educational conferences throughout the Metropolitan area under the supervision of the physician preceptor; and are tested with an examination at the termination of each rotation.

Credit recommendation: In the upper division baccalaureate category, a maximum of 52 semester hours (based on 1 credit per 40-hour week) in Supervised Experiential Training (12/77).

Dermatology

Location: U.S. Public Health Service Hospital, Bay Street and Vanderbilt Avenue, Staten Island, NY.

Length: 34 hours (10 months).

Dates: September 1974—Present.

Objective: To provide knowledge of the diagnosis and treatment of diseases of the skin.

Instruction: Nomenclature and description of dermatologic lesions; differentiation between cutaneous responses to systemic or local disease; differential diagnoses and principles of treatment. Use of audiovisual materials is emphasized to help recognition of dermatologic lesions.

Credit recommendation: In the upper division baccalaureate category, 2 semester hours in Health and Medically Related Subjects (12/77).

Dietetics

Refer to Anesthesia.

Electrocardiography

Refer to Medicine.

Health History and Physical Examination

Location: U.S. Public Health Service Hospital, Bay Street and Vanderbilt Avenue, Staten Island, NY.

Length: 91 hours (10 months); includes 40 hours of laboratory experience.

Dates: September 1974—Present.

Objective: To provide the knowledge and skills necessary to elicit a thorough history and conduct a competent physical examination.

Instruction: General theory of the health history and physical examination; their importance in the diagnosis of disease; the correct format and techniques used in taking medical histories and in performing physical examinations. Complete histories and physicals are performed under supervision on hospital patients.

Credit recommendation: In the upper division baccalaureate category, 4 semester hours in Health and Medically Related Subjects (3 lecture, 1 laboratory) (12/77).

Human Behavior in Family Practice

Location: U.S. Public Health Service Hospital, Bay Street and Vanderbilt Avenue, Staten Island, NY.

Length: 38 hours (10 months).

Dates: September 1977—Present.

Objective: To sensitize students to the psychosociological needs of patients and their families.

Instruction: Common emotional and adjustment disorders; skills to deal effectively with such disorders; procedures for making appropriate referrals in complex cases. Role playing and audiovisual materials relating to clinical case examples are used. Students make a field trip to a nursing home.

Credit recommendation: In the upper division baccalaureate category, 2 semester hours in Applied Behavioral Science (12/77).

Medical-Surgical Techniques

Location: U.S. Public Health Service Hospital, Bay Street and Vanderbilt Avenue, Staten Island, NY.

Length: 85 hours (10 months); includes 43 hours of laboratory experience.

Dates: September 1974—Present.

Objective: To provide knowledge and skills in performing basic medical and surgical techniques.

Instruction: Introduction to the health care team: functions of members; professional standards and ethics; medicolegal aspects; hospital safety; and health education. Development of the basic techniques of: vital signs; surgical asepsis and dressings; central venous pressure; medications and injections; application and removal of casts and splints; pre- and postoperative care; tracheotomy; electrocardiogram; rehabilitation; physical therapy; and nasogastric intubation.

Credit recommendation: In the upper division baccalaureate category, 4 semester hours in Health and Medically Related Subjects (3 lecture, 1 laboratory) (12/77).

Medicine
1. Cardiopulmonary Resuscitation
2. Electrocardiography
3. Medicine
4. Respiratory Therapy

Location: U.S. Public Health Service Hospital, Bay Street and Vanderbilt Avenue, Staten Island, NY.

Length: 1. 13 hours (10 months).
2. 9 hours (10 months).
3. 101 hours (10 months).
4. 9 hours (10 months).

Dates: September 1974—Present.

Objective: To provide an understanding of the concepts of medicine and its subdivisions: cardiopulmonary resuscitation; electrocardiography; respiratory therapy.

Instruction: Course 1: Prudent living as a cause of healthy hearts; preventing unnecessary deaths from heart disease; advanced cardiopulmonary resuscitation. Students perform CPR on an appropriate manikin to meet the performance standards of the American Heart Association and the American Red Cross. **Course 2:** Introduction to the normal electrocardiogram; basic physiologic considerations and vector theory; characteristics of, and electrocardiographic patterns in, right and left ventricular hypertrophy; coronary disease; digitalis toxicity; hypothyroidism and resulting electrolyte imbalance. **Course 3:** Etiology, diagnosis, and therapy of pathological conditions of the following systems: musculoskeletal; respiratory; lymphatic; cardiovascular; neurological; endocrine; gastrointestinal; urological. **Course 4:** Review of the anatomy and physiology of the respiratory system; signs and symptoms of the need for respiratory assistance; management of airway problems and respiratory distress; suctioning; evaluation of blood gases.

Credit recommendation: In the upper division baccalaureate category, 8 semester hours in Health and Medically Related Subjects (12/77).

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Microbiology

Location: U.S. Public Health Service Hospital, Bay Street and Vanderbilt Avenue, Staten Island, NY.

Length: 38 hours (10 months).

Dates: September 1974—Present.

Objective: To provide a survey of causative agents and clinical manifestations of specific diseases.

Instruction: Classification of bacteria, bacterial cytology, and microbial genetics. Description of organisms; the diseases they cause; their pathogenesis; appropriate diagnostic tests; therapy; epidemiology; control. Course does *not* include laboratory experience.

Credit recommendation: In the upper division baccalaureate category, 2 semester hours in Science (12/77). NOTE: This course is *not* a substitute for a basic course in Microbiology.

Obstetrics and Gynecology

Location: U.S. Public Health Service Hospital, Bay Street and Vanderbilt Avenue, Staten Island, NY.

Length: 20 hours (10 months).

Dates: September 1974—Present.

Objective: To provide knowledge of the normal and abnormal female reproduction system.

Instruction: Anatomy and physiology of the female reproductive tract; sexuality; family planning; fertility and infertility; placental development and the gravid uterus; fetal nutrition and growth; endocrine changes during pregnancy; normal and complicated pregnancies; antepartum care; labor and delivery; common gynecological disorders. Demonstration of procedures for pelvic examinations, including the use of manual techniques and gynecological instruments.

Credit recommendation: In the upper division baccalaureate category, 1 semester hour in Health and Medically Related Subjects (12/77).

Ophthalmology

Refer to Surgical Specialties.

Oral Pathology

Refer to Surgical Specialties.

Orthopedics

Refer to Surgical Specialties.

Otolaryngology

Refer to Surgical Specialties.

Pathology

Location: U.S. Public Health Service Hospital, Bay Street and Vanderbilt Avenue, Staten Island, NY.

Length: 39 hours (10 months).

Dates: September 1974—Present.

Objective: To provide an understanding of the pathogenesis of the disease process as it affects other parts of the body and the patient as a whole, and the pathology of specific diseases.

Instruction: Origin and progress of disease at the cellular level; etiology, pathogenesis, morphology, and clinical course of the most common pathological disorders. Lectures are supplemented by the use of audiovisual materials.

Credit recommendation: In the upper division baccalaureate category, 2 semester hours in Science (Clinical) (12/77).

Pediatrics

Location: U.S. Public Health Service Hospital, Bay Street and Vanderbilt Avenue, Staten Island, NY.

Length: 54 hours (10 months).

Dates: September 1974—Present.

Objective: To provide an understanding of the normal and abnormal development of infants and children, and the diagnosis and treatment of pediatric conditions.

Instruction: Care of the well baby and child; normal growth and development, and their assessment; pediatric cardiology; child abuse and neglect; genetics; metabolic and endocrine disorders; allergic reactions; communicable childhood diseases; pediatric emergencies; mental retardation; adolescence; disorders of the digestive, musculoskeletal, and nervous systems; diseases of the urinary and respiratory tracts; the taking of histories and performance of physical examinations.

Credit recommendation: In the upper division baccalaureate category, 3 semester hours in Health (12/77).

Psychiatry

Location: U.S. Public Health Service Hospital, Bay Street and Vanderbilt Avenue, Staten Island, NY.

Length: 22 hours (10 months).

Dates: September 1974—Present.

Objective: To provide an understanding of emotional and psychological disorders and elements of care in mental illness.

Instruction: Development of normal personalities; the range of personality disorders, including organic brain syndrome and neuroses and psychoses of children and adults; introduction to the psychiatric interview and the management of psychiatric disorders.

Credit recommendation: In the upper division baccalaureate category, 1 semester hour in Health and Medically Related Subjects (12/77).

Radiology

Location: U.S. Public Health Service Hospital, Bay Street and Vanderbilt Avenue, Staten Island, NY.

Length: 40 hours (10 months).

Dates: September 1974—Present.

Objective: To provide knowledge of elementary radiation theory and the use of diagnostic radiology in patient care.

Instruction: History, terminology, indications, and techniques of normal X-rays and special procedures; the recognition of deviations from the normal. Extensive use of audiovisual materials.

Credit recommendation: In the upper division baccalaureate category, 2 semester hours in Health and Medically Related Subjects (12/77).

Respiratory Therapy

Refer to Medicine.

Surgery

1. Surgery
2. Surgical Procedures Laboratory

Location: U.S. Public Health Service Hospital, Bay Street and Vanderbilt Avenue, Staten Island, NY.

Length: 1. 55 hours (10 months).
2. 32 hours (1 week).

Dates: 1. September 1974—Present.
2. June 1975—Present.

Objective: To provide an understanding of, and skills in, basic surgical principles and procedures.

Instruction: Course 1: Surgical conditions of all systems of the body; their etiology, diagnosis, and treatment; trauma; suturing; infections; burns; plastic procedures; infusion; cut downs; soft tissue surgery; glandular and tumor surgery. **Course 2:** Open gloving; closed gloving; surgical scrub procedure; gowning; surgical asepsis; surgical preparation; one- and two-handed suture ties; instrument ties; suturing. Students rotate in groups of four through the Surgical Procedures Laboratory. They practice for three days on a canine cadaver; on the fourth day an anesthetized live canine model is used.

Credit recommendation: In the upper division baccalaureate category, 4 semester hours in Health and Medically Related Subjects (3 lecture, 1 laboratory) (12/77).

Surgical Procedures Laboratory

Refer to Surgery.

Surgical Specialities

1. Ophthalmology
2. Oral Pathology
3. Orthopedics
4. Otolaryngology
5. Urology

Location: U.S. Public Health Service Hospital, Bay Street and Vanderbilt Avenue, Staten Island, NY.

Length: 1. 15 hours (10 months).
2. 11 hours (10 months).
3. 40 hours (10 months).
4. 9 hours (10 months).
5. 17 hours (10 months).

Dates: September 1974—Present.

Objective: To provide knowledge and management of the following common surgical specialities: ophthalmology; oral pathology; orthopedics; otolaryngology; urology.

Instruction: Course 1: Anatomy and physiology of the eye; routine history and ocular examination; disorders of the lacrimal apparatus; conditions of the eyelids and optic nerve; lesions of the conjunctiva and cornea; uveitis; cataracts; glaucoma; diseases of the retina; ocular emergencies. Laboratory exercises include demonstrations and practical experience in such matters as measuring visual acuity, refractory errors, visual fields, and ophthalmoscope. **Course 2:** Classification, significance, and management of oral infections; evaluation, causes, and corrective techniques of facial trauma; oral tumors, dental anesthesia and radiology, and caries. **Course 3:** General principles of orthopedics; descriptions of orthopedic problems. Emphasis on etiology, diagnosis, and treatment. **Course 4:** Study of disorders of the ear, nose, and throat; evaluation of the disorders; their diagnosis and treatment. **Course 5:** Common disorders of the genitourinary system; their etiology, diagnosis, and modalities of treatment.

Credit recommendation: In the upper division baccalaureate category, 6 semester hours in Health and Medically Related Subjects (12/77).

Urology

Refer to Surgical Specialties.

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WESTERN ELECTRIC COMPANY, INCORPORATED

The Western Electric Company, Incorporated, which employs over 158,000 persons, is part of the nationwide Bell System. The Company manufactures and supplies communication equipment for the Bell System.

The Bell Sales Division includes a Regional Center and a Material Management Center in each of the seven regions in the country. Nationwide, there are 43 distribution and service centers and 29 installation offices.

The Bell Sales Division has developed courses in many different subject areas to provide employees with an opportunity to receive appropriate training at various intervals in their careers. Courses focus on developing the technical, administrative, and managerial skills that are most relevant to the job being performed.

BELL SYSTEM TRAINING CENTER

Western Electric's Bell System Training Center located in Dublin, Ohio provides national hands-on training to Western Electric and Telephone Operating Company employees who engineer, install, test, maintain, and repair the switching, transmission, and Private Branch Exchange (PBX) equipment used in the Bell System Telecommunications Network. Employees are released from other job responsibilities to attend the courses.

Source of official student records for Western Electric employees: The student's regional headquarters personnel office. Source of official student records for Bell System Operating Company employees: The student's company personnel office.

1. No. 1 ESS Systems Verification Testing Theory (539)
2. No. 1 Electronic Switching Systems (ESS) Training (540)

Location: 1. Western Electric regional locations: Atlanta, GA; Aurora, CO; Dallas, TX; King of Prussia, PA; Newark, NJ; Rolling Meadows, IL; St. Louis, MO; Sunnyvale, CA.
2. Bell System Training Center, Dublin, OH.

Length: 1. 160 hours (4 weeks).
2. 200 hours (5 weeks).

Dates: 1. December 1975—Present.
2. August 1975—Present.

Objective: To provide the student with the analytical skills and knowledge required to perform the installation of the Western Electric No. 1 Electronic Switching System (ESS) and perform all the diagnostic and troubleshooting tasks necessary to make the system fully operational.

Instruction: The use of generic system documents; utilization of the office parameter data assembly to identify failures involving parameters; utilization of the translation data assembly and teletype input/output messages to identify call progression failures; initiation of audit tests, analysis of audit printouts, diagnostic test results, maintenance interrupt printouts, and network failure printouts. Handling of recent change message printouts, call processing parameter and translation troubles, and interrupt, data validation, and audit error message printouts; isolation and location of trunk faults; analysis and troubleshooting of hardware troubles for the entire system. The course is equally divided between lecture/discussion and practical application of the material presented. (Prerequisite: No. 1 ESS Complex Hardware Testing, CHT-1.)

Credit recommendation: In the lower division baccalaureate/associate degree category, 8 semester hours in Computer Technology (3 lecture, 5 laboratory) (10/77). NOTE: Courses 1 and 2 must both be completed to receive credit.

1. No. 2 ESS Peripheral Units (508C)
2. No. 2B ESS Processor (509CB)
3. No. 2B Electronic Switching System (ESS) (537B)

Location: 1 and 2. Western Electric regional locations: Atlanta, GA; Aurora, CO;

Dallas, TX; King of Prussia, PA; Newark, NJ; Rolling Meadows, IL; St. Louis, MO; Sunnyvale, CA.
3. Bell System Training Center, Dublin, OH.

Length: 1. 60 hours (1½ weeks); trainee-paced programmed instruction.
2. 160 hours (4 weeks); trainee-paced programmed instruction.
3. 200 hours (5 weeks).

Dates: 1. June 1974—Present.
2. September 1976—Present.
3. September 1976—Present.

Objective: To provide the student with an understanding of the basics of digital electronics and computer technology, and to apply these principles to the detailed study of the Western Electric No. 2B Electronic Switching System (ESS).

Instruction: No. 2B ESS terminology; network path selection and failures; trunk test panel operation; troubleshooting trunks, junctors, and service circuits. Processor terminology; program languages; timing and control; memory; controllers; processor procedures and tests; I/O circuits; diagnostic programs. Detailed study of the No. 2B ESS including control unit tests, peripheral unit tests, call processing maintenance, system recovery, and operational tests. The course is equally divided between lecture/discussion and the practical application of the material presented. (Prerequisites: Basic ESS Installation Skills 506, Introduction to ESS 507, and ESS Peripheral Units 508.)

Credit recommendation: In the lower division baccalaureate/associate degree category, 3 semester hours in Digital Electronics (2 lecture, 1 laboratory) and 7 semester hours in Computer Technology (3 lecture, 4 laboratory) (10/77). NOTE: Courses 1, 2, and 3 must all be completed to receive credit.

1. Remreed TLN and LLN (508R)
2. No. 1 ESS Central Processor Testing and Program (509B)
3. No. 1 ESS Programming and Circuitry (534)
4. No. 1 ESS Complex Hardware Testing (CHT-1)

Location: 1, 2, and 3. Western Electric regional locations: Atlanta, GA; Aurora, CO; Dallas, TX; King of Prussia, PA; Newark, NJ; Rolling Meadows, IL; St. Louis, MO; Sunnyvale, CA.
4. Bell System Training Center, Dublin, OH.

Length: 1. 24 hours (3 days); programmed instruction.
2. 160 hours (4 weeks); 120 hours trainee-paced programmed instruction and 40 hours of laboratory work.
3. 160 hours (4 weeks).
4. 172 hours (4 weeks).

Dates: 1. June 1976—Present.
2. November 1972—Present.
3. July 1968—Present.
4. November 1972—Present.

Objective: To provide the student with an understanding of the basics of digital electronics and computer technology, and to apply these principles to the detailed study of the Western Electric No. 1 Electronic Switching System (ESS).

Instruction: No. 1 ESS terminology; Remreed Trunk Line and Line Link Networks (TLN and LLN). Preliminary testing of the central processor and single system diagnostic testing; program store; call store; central control; program language; program documentation. Circuit descriptions and schematic drawings for the central control and signal processor circuitry; single system diagnostic testing and initialization test programs; trouble-locating procedures. Detailed study of the No. 1 ESS, including control unit tests, peripheral unit tests, call processing maintenance, system recovery, and operational tests. The course is equally divided between lecture/discussion and the practical application of the material presented. (Prerequisites: Basic ESS Installation Skills 506, Introduction to ESS 507, and ESS Peripheral Units 508.)

Credit recommendation: In the lower division baccalaureate/associate degree category, 4 semester hours in Digital Electronics (3 lecture, 1 laboratory) and 7 semester hours in Computer Technology (3 lecture, 4 laboratory) (10/77). NOTE: Courses 1, 2, 3, and 4 must all be completed to receive credit.

XEROX CORPORATION

INFORMATION SYSTEMS GROUP

The Xerox Information Systems Group (ISG) is responsible for the marketing and servicing of all copier and duplicator products within the United States.

The ISG Management Training office provides training and development to meet the company's management manpower needs from the first level through middle management. Courses follow a progression which builds on previous courses and work experience. Some courses are general in nature and are taken by all managers at a particular level; others have a basic core of material, but are focused differently depending on an individual's area of management.

Source of official student records: Xerox Corporation, Information Systems Group, Headquarters Management Training Office, Xerox Square 836, Rochester, New York 14644.

Field Executive Development Program (FEDP)

Location: International Center for Training and Management Development, Leesburg, VA.

Length: 82 hours (2 weeks).

Dates: January 1973—Present.

Objective: To provide the technical and managerial knowledge necessary to run a branch as a general manager.

Instruction: Case analyses in the following areas: management selection and assessment; affirmative action; managing the branch service and administrative functions; planning; setting priorities and managing multiple objectives; establishing and using management information systems; branch financial management. (Prerequisite: Pre-Field Executive Development Program.)

Credit recommendation: In the graduate degree category, 3 semester hours in Case Studies in Behavioral Science or Management (7/77).

Headquarters New Manager Workshop

Refer to New Manager Workshop.

Logistics and Distribution Manager Workshop

Refer to New Manager Workshop.

Management Action Workshop

Location: International Center for Training and Management Development, Leesburg, VA; Management Education Center, Rochester, NY; Western Region Headquarters, Santa Ana, CA.

Dates: January 1975—Present.

Objective: To increase the participants' awareness of a wide range of behavioral science approaches to increased leadership effectiveness and to provide participants the opportunity to examine their own leadership styles in light of these approaches.

Instruction: Participants explore and analyze the effects of their managerial actions and approaches by studying current behavioral concepts and by looking at previous on-the-job behavior, clarifying how they are likely to behave in certain situations, and examining their in-class behavior under a variety of simulated conditions. (Prerequisite: New Managers Workshop.)

Credit recommendation: In the upper division baccalaureate category, 2 semester hours in Management or Psychology; or in the graduate degree category, 1 semester hour in Management or Psychology (7/77).

Management Studies

Location: Management Education Center, Rochester, NY; 95 branch locations throughout the United States.

Length: 48 hours (11 weeks).

Dates: January 1974—Present.

Objective: To provide the management candidate with a working knowledge of basic managerial skills and a theoretical background in motivation, management styles, communication, and human interaction.

Instruction: Overview of the management process; planning and goal setting; utilizing the organization; implementing and monitoring; problem solving; instrumented feedback; development action planning. In addition to the use of lecture/discussion and audiovisual presentations throughout the course, a full day is devoted to small group presentations on motivation, management style, and communication.

Credit recommendation: In the upper division baccalaureate category, 2 semester hours in Behavioral Aspects of Management (7/77).

New Administrative Manager Workshop

Refer to New Manager Workshop.

New Manager Workshop
1. Headquarters New Manager Workshop
2. Logistics and Distribution Manager Workshop
3. New Administrative Manager Workshop
4. New Sales Manager Workshop
5. New Service Manager Workshop, Phases I and II

Location: Management Education Center, Rochester, NY.

Length: 1. 40 hours (1 week).
2. 40 hours (1 week).
3. 80 hours (2 weeks).
4. 40 hours (1 week).
5. 120 hours (3 weeks); two-week session (Phase I) followed by one-week session (Phase II) four months later.

Dates: 1. June 1976—Present.
2. June 1976—Present.
3. April 1976—Present.
4. June 1976—Present.
5. January 1977—Present.

Objective: To enable the new manager to define his/her people-management task, to develop skills to effectively work with employees, and to plan a personal management system to be implemented on the job.

Instruction: Each course: Time planning and setting priorities; situational leadership; defining objectives, criteria, and standards; assessing subordinates; tracking and monitoring; influencing and motivation skills; managing critical interactions; communicating affirmative action; total employee development process; transition to management; the management process; establishing and communicating performance expectations; management information system; providing feedback on performance. **Course 3 and Course 5:** Expand on the following topics: progressive discipline; subordinate development; career guidance.

Credit recommendation: Course 1, Course 2, or Course 4: In the upper division baccalaureate category, 2 semester hours in Personnel Management; or in the graduate degree category, 1 semester hour in Personnel Management (7/77). **Course 3:** In the upper division baccalaureate category, 3 semester hours in Personnel Management; or in the graduate degree category, 2 semester hours in Personnel Management (7/77). **Course 5:** In the upper division baccalaureate category, 4 semester hours in Personnel Management; or in the graduate degree category, 3 semester hours in Personnel Management (7/77).

New Sales Manager Workshop

Refer to New Manager Workshop.

New Service Manager Workshop, Phases I and II

Refer to New Manager Workshop.

Pre-Management Seminars
1. Pre-Sales Manager Workshop
2. Region Administration Workshop

Location: International Center for Training and Management Development, Leesburg, VA.

Length: 1. 42 hours (1 week).
2. 40 hours (1 week).

Dates: 1. March 1977—Present.
2. August 1976—Present.

Objective: Course 1: To provide the management candidate with the basic management knowledge and skills necessary to assume a first-line sales management position. **Course 2:** To prepare the management candidate with the basic management knowledge and skills necessary to assume a first-line administrative management position.

Instruction: Course 1: Employee selection; affirmative action; management discussion skills; time utilization and establishing priorities; management information system; personnel policies; compensation; personal planning. The course includes the use of lecture/discussion, individual role-play exercises, and group presentation. (Prerequisite: Management Studies.) **Course 2:** Employee selection; affirmative action; management discussion skills; interpersonal skills for dealing with conflict, anger, and change;

self-assertion; transactional analysis. The course includes the use of lecture/discussion, individual role-play exercises, and group presentations. (Prerequisite: Management Studies.)

Credit recommendation: Course 1: In the upper division baccalaureate category or in the graduate degree category, 1 semester hour in Marketing Management (7/77). **Course 2:** In the upper division baccalaureate category, 2 semester hours in Behavioral Aspects of Management or Industrial Psychology; or in the graduate degree category, 1 semester hour in Behavioral Aspects of Management or Industrial Psychology (7/77).

Pre-Sales Manager Workshop

Refer to Pre-Management Seminars.

Region Administrative Workshop

Refer to Pre-Management Seminars.

Staff Effectiveness Workshop

Location: Management Education Center, Rochester, NY.

Length: 40 hours (1 week).

Dates: June 1976—Present.

Objective: To provide the staff manager with an understanding of the role of staff, and of how staff functions relate to one another and to line functions, by identifying appropriate influence styles, addressing barriers to effective performance, and determining strategies to gain commitments.

Instruction: Program management; influence style analysis; interactive decisionmaking; conflict management; relationship/role analysis; situational leadership; decision analysis; organizational character; management of agreement.

Credit recommendation: In the graduate degree category, 1 semester hour in Management (7/77).

YWCA OF THE CITY OF NEW YORK

The YWCA of the City of New York, established in 1870, is a building-centered, nonprofit agency and a chartered member Association, in good standing, of The Young Women's Christian Association of the United States of America.

Located at Lexington Avenue and 53rd Street, the YWCA's primary target population is young women between the ages of 18 and 35. Over 200 coeducational courses are offered for all age groups through four major program components: Department of Health, Physical Education, and Recreation; Craft Students League; Department of Continuing Education; and Women's Center. The YWCA serves over 20,000 people annually.

Source of official student records: Assistant Executive Director for Program, YWCA of the City of New York, 610 Lexington Avenue, New York, New York 10022.

Gregg Refresher

Location: YWCA of the City of New York, 610 Lexington Avenue, New York, NY.

Length: 40 hours (10 weeks).

Dates: June 1978—Present.

Objective: To reinforce the student's understanding of the principles of Gregg Shorthand in order to develop skill in taking dictation of business materials for transcription.

Instruction: Principles of Gregg Shorthand (the mastery of writing sounds, brief forms and phrases, and basic business vocabulary); language skills development (grammar, spelling, and typographical usage). Practice in business letter dictation and development of transcription techniques. Dictation at varying speeds with an attainment level of 70–90 words per minute for 3–5 minutes with a five percent error tolerance.

Credit recommendation: In the lower division baccalaureate/associate degree category, 3 semester hours in Business Administration, Business Education, or Secretarial Science (5/78).

Pitman Refresher

Location: YWCA of the City of New York, 610 Lexington Avenue, New York, NY.

Length: 40 hours (10 weeks).

Dates: June 1978—Present.

Objective: To reinforce the student's understanding of the principles of Pitman Shorthand in order to develop skill in taking dictation of business materials for transcription.

Instruction: Principles of Pitman Shorthand (the mastery of writing sounds, short forms and phrases, and basic business vocabulary); language skills development (grammar, spelling, and typographical usage). Practice in business letter dictation and development of transcription techniques. Dictation at varying speeds with an attainment level of 70–90 words per minute for 3–5 minutes with a five percent error tolerance.

Credit recommendation: In the lower division baccalaureate/associate degree category, 3 semester hours in Business Administration, Business Education, or Secretarial Science (5/78).

1. Principles of Accounting: Part I
2. Principles of Accounting: Part II

Location: YWCA of the City of New York, 610 Lexington Avenue, New York. NY.

Length: 1. 30 hours (10 weeks).
2. 30 hours (10 weeks).

Dates: October 1978—Present.

Objective: To provide the student with a basic understanding of accounting terminology, concepts, and practices.

Instruction: Fundamentals of accounting theory and practice: theory of debit and credit; classification of accounts; principles underlying accounting records; business papers and documents used as the basis of original entry; preparation of balance sheets and income statements; principles and problems of controlling accounts of individual proprietorships and partnerships.

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 4 semester hours in Accounting, Business Administration, Business Education, or Secretarial Science (5/78).

NOTE: Credit should not be awarded until Course 2 is completed.

Principles of Accounting: Part II

Refer to Principles of Accounting: Part I.

SECTION II

INTRODUCTION

The courses listed in this section are administered by government agencies in New York State under the Comprehensive Employment and Training Act (CETA), the nation's major manpower law. Enacted in 1973, CETA mandates a variety of decentralized training and job placement programs that state and local government agencies, called "prime sponsors," plan and operate with direct Federal grants under regulations set by the U.S. Department of Labor.

In 1977 CETA was amended with the passage of the Youth Employment and Demonstration Projects Act (YEDPA). YEDPA extends the scope of CETA by providing for job training and employment opportunities to unemployed, underemployed, and disadvantaged persons 16-21 years old. YEDPA also requires that both in-school and out-of-school youth who are employed in programs established by prime sponsors have the opportunity to earn credit toward high school diplomas or college degrees. The evaluation of these types of CETA courses, which is a new activity of the Program, is part of the overall response of the New York State Education Department to this legislative mandate.

In addition to evaluating CETA training programs for the purpose of establishing credit recommendations, the Program is also assisting prime sponsors by providing guidance in the development of courses appropriate to the needs of their trainees and by helping the prime sponsors and the trainees make effective use of the credit recommendations. In this latter effort the Program assists individual CETA course participants in gaining educational credit for courses which have received credit recommendations and conducts conferences between prime sponsors and educational institutions to promote cooperative arrangements.

For further information on this specific activity of the Program, contact:

Catharine D. McHugh
Program on Noncollegiate
Sponsored Instruction
Cultural Education Center, Room 5C85
Empire State Plaza
Albany, New York 12230
Telephone: (518) 474-8592

CITY OF ALBANY
DEPARTMENT OF HUMAN RESOURCES

Life Management Skills

Location: Human Resource Center, North Lake and Central Avenues, Albany, NY; Adult Learning Center, 222 South Pearl Street, Albany, NY.

Length: **Level I:** 14 hours.
Level II: 7 hours.
Level III: 40 hours (approximate).

Dates: June 1978—Present.

Objective: To enable the participant to develop a greater self-awareness, a more positive self-image, and a greater understanding of the needs, successes, values, strengths, and goals of self and others, and to take greater accountability for personal self-direction, life-planning, and goal-setting.

Instruction: Level I: Two-day human potential workshop during which participants have an opportunity to discover, share, and reinforce their strengths, assets, successes, needs, values, and personal life goals. **Level II:** In addition to successfully completing Level I, the participants take part in a one-day workshop on employability skills in which they consider career alternatives, employer expectations, communications, and interviewing skills. **Level III:** In addition to successfully completing Levels I and II, the participants carry out an independent study project relating to personal career planning and complete a "Life Planning and Personal Goals Workbook." The course format includes experiential and small group interaction, video-tape and role-play interviews, lecture, individual counseling, and independent study and contracting.

Credit recommendation: Level I: In the lower division baccalaureate/associate degree category, 1 semester hour in Human Services, Psychology, Social Sciences, or Sociology (6/78). **Level II:** In the lower division baccalaureate/associate degree category, 1 semester hour in Human Services, Psychology, Social Sciences, or Sociology (6/78). **Level III:** In the lower division baccalaureate/associate degree category, 1 semester hour in Human Services, Psychology, Social Sciences, or Sociology (6/78).

CITY OF YONKERS DEPARTMENT OF EMPLOYMENT AND TRAINING

The City of Yonkers Department of Employment and Training offers a variety of employment services to residents of the City who qualify as disadvantaged, unemployed, or underemployed. As a prime sponsor under the Comprehensive Employment and Training Act (CETA), it provides on-the-job and vocational training programs, counseling, employment referrals, programs designed to prepare youth for jobs, and public service employment projects. Through contracts with several educational agencies in the area, the Department offers training to its CETA participants.

Source of official student records for courses offered at the Rochambeau CETA Skills Training Center: Director, Rochambeau CETA Skills Training Center, 228 Fisher Avenue, White Plains, New York 10606. Source of official student records for courses offered at the Westchester Educational Opportunity Center: Director, Westchester Educational Opportunity Center, 41 Main Street, Yonkers, New York 10701.

Bookkeeping

1. Bookkeeping I
2. Bookkeeping II

Location: Educational Opportunity Center, 41 Main Street, Yonkers, NY.

Length: **Course 1, Version 1:** 30 hours (10 weeks).
Course 1, Version 2: 50 hours (10 weeks).
Course 2, Version 1: 30 hours (10 weeks).
Course 2, Version 2: 50 hours (10 weeks).

Dates: **Version 1:** December 1977—September 1978.
Version 2: October 1978—Present.

Objective: To provide the student with an understanding of the introductory concepts and practices of bookkeeping.

Instruction: Fundamentals of bookkeeping theory. Use of journals and ledgers; preparation of financial statements; payroll; notes; depreciation; inventories.

Credit recommendation: Version 1: In the lower division baccalaureate/associate degree category, 2 semester hours in Accounting (6/78). **Version 2:** In the lower division baccalaureate/associate degree category, 3 semester hours in Accounting (6/78).

Business Communications

1. Business English
2. Correspondence I
3. Correspondence II

Location: Educational Opportunity Center, 41 Main Street, Yonkers, NY.

Length: 100 hours (20 weeks).

Dates: December 1977—Present.

Objective: To enable the student to develop effective communications skills.

Instruction: Development of skills necessary to master effective business communication. Correct grammatical usage; business letters; applications; interviews; report writing; development of oral communication skills.

Credit recommendation: In the lower division baccalaureate/associate degree category, 2 semester hours in Business Communications (6/78).

Business Math

1. Business Math I
2. Business Math II

Location: Educational Opportunity Center, 41 Main Street, Yonkers, NY.

Length: 100 hours (20 weeks).

Dates: December 1977—Present.

Objective: To provide the student with the knowledge of the fundamentals of applied business mathematics.

Instruction: Basic application of mathematics to business problems. Simple interest; finance charges; discounts; bank statements; installment buying; payroll taxes.

Credit recommendation: In the lower division baccalaureate/associate degree category, 3 semester hours in Business, Marketing, or Secretarial Science (6/78).

The following courses conducted by the City of Yonkers Department of Employment and Training were evaluated at the Rochambeau CETA Skills Training Center in White Plains, New York, on July 11 and August 31, 1978, but the official course descriptions and credit recommendations were not available when this Supplement went to press. Information on these courses may be obtained from the Program office.

Auto Body Repair
Automotive Repair
Electronics Occupations
Health Care Occupations
Metal Machinery Occupations

NEW YORK STATE DEPARTMENT OF CIVIL SERVICE CETA TRAINING PROGRAM

The New York State Department of Civil Service provides training programs to meet statewide goals under the Comprehensive Employment and Training Act (CETA). The Public Service Careers Section of the Department's Career Opportunities Division has as its primary purpose the development and administration of educational programs designed to recruit and train the disadvantaged and place them in permanent jobs in the public sector. Thus, its purpose coincides with the general objectives of CETA.

The courses listed below are administered by the Public Service Careers Section for CETA participants in the Albany, Buffalo, and New York City areas. Course participants are carefully screened for appropriate skill levels prior to entering the courses. Participants receive counseling and individual support. Classroom instruction is also offered in communication skills and human relations to enhance employment opportunities.

Source of official student records: Chief, Public Service Careers Representative, Career Opportunities Division, New York State Department of Civil Service, The State Office Building Campus, Albany, New York 12239.

Shorthand I

Location: Educational Opportunity Center, Troy, NY; Department of Civil Service Buildings in Albany, Buffalo, and New York City.

Length: 105 hours (12 weeks).

Dates: April 1975—Present.

Objective: To provide the student with the shorthand skills needed for an entry-level position as a secretary.

Instruction: The course is designed for students who already have a minimum demonstrated skill of 50 words per minute. Increased skills in dictation, transcription, spelling, and English mechanics are developed through practical application in a supervised job setting and individualized classroom instruction in dictation, transcription, spelling, and English mechanics. Upon completion of the course, students are required to pass the New York State Civil Service examination for stenographer (GS-5) and to achieve a stenographic speed of at least 80 words per minute.

Credit recommendation: In the lower division baccalaureate/associate degree category, 3 semester hours in Secretarial Science (5/78).

Typing I

Location: Educational Opportunity Center, Troy, NY; Department of Civil Service Buildings in Albany, Buffalo, and New York City.

Length: 105 hours (12 weeks).

Dates: April 1975—Present.

Objective: To provide the student with the skills needed for an entry-level position as a typist.

Instruction: The course is designed for students who already have a minimum demonstrated skill of 30 words per minute. Speed, accuracy, and production are developed through practical application in a supervised work setting and individualized classroom instruction in the preparation of business letters, forms, tables, memoranda, tabulations, and duplication processes. Upon completion of the course, students are required to pass the New York State Civil Service examination for typist (GS-5).

Credit recommendation: In the lower division baccalaureate/associate degree category, 3 semester hours in Secretarial Science (5/78).

NIAGARA COUNTY MANPOWER DEVELOPMENT AND TRAINING DEPARTMENT

The Niagara County Manpower Development and Training Department provides a complete range of manpower and supportive services to address the needs of the residents of the County. These services include vocational training programs, on-the-job training, in-school and out-of-school programs for youth, and counseling and supportive services for program participants. As the prime sponsor under the Comprehensive Employment and Training Act (CETA) for countywide training for economically disadvantaged, unemployed, and underemployed residents, the Department contracts with several agencies to offer training programs.

Source of official student records: Senior Program Coordinator, Niagara County Manpower Development and Training Department, Court House, Lockport, New York 14094.

Diesel Mechanics—Heavy Equipment Repair

Location: Niagara-Orleans Area Vocational Center, Saunders Settlement Road, Sanborn, NY.

Length: 1,125 hours (46 weeks).

Dates: October 1976—Present.

Objective: To develop skills sufficient for entry-level work in diesel mechanics and heavy equipment repair.

Instruction: Diesel theory; fuel injectors and injection systems; engine components; related systems; recordkeeping; steering systems; tire wheels and brakes; springs and frames; transmission and power trains; welding; sanding and painting.

Credit recommendation: In the lower division baccalaureate/associate degree category, 18 semester hours in Diesel Mechanics (12 theory, 6 shop) (5/78).

Machine Operator

Location: Niagara-Orleans Area Vocational Center, Saunders Settlement Road, Sanborn, NY.

Length: 270 hours (11-12 weeks).

Dates: October 1977—Present.

Objective: To develop skills sufficient for entry-level work as a production machine tool operator.

Instruction: Orientation and safety; blueprint reading; shop math; bench work; lathe tool grinding; basic lathe, drill press, and milling machine operations.

Credit recommendation: In the lower division baccalaureate/associate degree category, 6 semester hours in Machine Processes or Machine Tools (Shop) (5/78).

Machinist

Location: Niagara-Orleans Area Vocational Center, Saunders Settlement Road, Sanborn, NY.

Length: 570 hours (23 weeks); includes 483 hours of laboratory work.

Dates: January 1975—Present.

Objective: To develop skills sufficient for entry-level work in machine operation or maintenance.

Instruction: Orientation and safety; blueprint reading; shop math; bench work; lathe tool grinding. Operations of the following types—basic lathe, drill press, milling machine (vertical and horizontal), shaper, advanced lathe, and surface grinder.

Credit recommendation: In the lower division baccalaureate/associate degree category, 12 semester hours in Machine Processes or Machine Tools (Shop) (5/78).

Major Appliance Repair

Location: Niagara County Community College, Saunders Settlement Road, Sanborn, NY.

Length: 460 hours (23 weeks).

Dates: May 1977—Present.

Objective: To develop skills sufficient for entry-level work in major appliance repair.

Instruction: Electric motors; control devices; operation and servicing of washers, dryers, dishwashers, garbage disposals, trash compactors, electric ranges, electronic ovens, and air conditioners.

Credit recommendation: In the lower division baccalaureate/associate degree category, 12 semester hours in Service Technology (5/78).

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Refrigeration and Air Conditioning

Location: Niagara-Orleans Area Vocational Center, Saunders Settlement Road, Sanborn, NY.

Length: 540 hours (26 weeks).

Dates: October 1976—Present.

Objective: To develop skills sufficient for entry-level work in servicing refrigeration units and air conditioners.

Instruction: Fundamentals of refrigeration and air conditioning; basic refrigeration systems; domestic, commercial, and automotive air-conditioning systems; refrigeration components including compressors, evaporators, condensors, controls, and metering devices.

Credit recommendation: In the lower division baccalaureate/associate degree category, 12 semester hours in Refrigeration and Air Conditioning (Shop) (5/78).

Shorthand

Location: Niagara County Community College, Saunders Settlement Road, Sanborn, NY.

Length: 345 hours (25 weeks).

Dates: October 1976—Present.

Objective: To prepare students to write shorthand from new matter of medium difficulty for three minutes at 80 words per minute with no more than six errors.

Instruction: Introduction to Gregg Shorthand theory and skill development with emphasis on dictation and transcription from notes at progressively faster rates of speed; English usage and rules of punctuation; building of business vocabulary; practice in commonly used words and phrases.

Credit recommendation: In the lower division baccalaureate/associate degree category, 3 semester hours in Introductory Shorthand (5/78).

Typing

Location: Niagara County Community College, Saunders Settlement Road, Sanborn, NY.

Length: 250 hours (25 weeks).

Dates: October 1976—Present.

Objective: To provide the student with skills needed for an entry-level position as a typist.

Instruction: Mastery of the keyboard with a minimum attainment of 40 gross words per minute in a five-minute timed writing with a maximum of five errors. Basic business applications; personal applications; special applications; letter production; report production.

Credit recommendation: In the lower division baccalaureate/associate degree category, 3 semester hours in Introductory Typing (5/78).

Typing and Clerical Office Procedures

Location: Niagara County Community College, Saunders Settlement Road, Sanborn, NY.

Length: 500 hours (25 weeks).

Dates: October 1976—Present.

Objective: To provide the student with typing, clerical, and general office skills necessary for an entry-level position in an office.

Instruction: Typing: mastery of the keyboard with a minimum attainment of 40 gross words per minute in a five-minute timed writing with a maximum of five errors. Clerical office procedures: telephone procedures, correspondence, English usage; introduction to calculators, duplicators, and dictating-transcribing equipment; filing; mathematical usage; simulated office situations.

Credit recommendation: In the lower division baccalaureate/associate degree category, 3 semester hours in General Office Occupations and 3 semester hours in Introductory Typing (5/78).

Welding

Location: Niagara-Orleans Area Vocational Center, Saunders Settlement Road, Sanborn, NY.

Length: 580 hours (23 weeks).

Dates: May 1975—Present.

Objective: To develop skills sufficient for entry-level work in welding processes.

Instruction: Welding shop equipment; blueprint reading for welders; metals identification; fabrication; fundamental welding techniques, including oxygen-acetylene fusion welding, oxygen-acetylene braze welding, shielded metal arc welding, gas metal arc welding, and tungsten inert gas welding; oxygen-acetylene flame cutting; related theory.

Credit recommendation: In the lower division baccalaureate/associate degree category, 12 semester hours in Welding (Shop) (5/78).

WESTCHESTER COUNTY OFFICE OF EMPLOYMENT AND TRAINING

The Westchester County Office of Employment and Training serves the manpower needs of residents in the County by providing employment counseling, testing and career assessment, job placement, on-the-job and skills training, youth employment programs, and special services designed to place women in nontraditional jobs. As part of its efforts to enhance employment opportunities in Westchester County, it is a prime sponsor under the Comprehensive Employment and Training Act (CETA) and contracts with local educational agencies to provide training for disadvantaged, unemployed, or underemployed County residents.

Source of official student records: Contract Coordinator for Skills Training, Westchester County Office of Employment and Training, 148 Martine Avenue, White Plains, New York 10601.

Typing and Clerical Office Procedures

Location: Rochambeau CETA Skills Center, 228 Fisher Avenue, White Plains, NY.

Length: 1,000 hours (28 weeks).

Dates: October 1977—Present.

Objective: To provide the student with job entry-level typing skills and to introduce the student to general office and clerical procedures.

Instruction: Typing: mastery of the keyboard with a minimum attainment of 40 gross words per minute on a five-minute timed writing with a maximum of five errors. Clerical office procedures: telephone, correspondence, English usage, calculators, duplicators, filing, mathematical usage, simulated office situations, recordkeeping.

Credit recommendation: In the lower division baccalaureate/associate degree category, 3 semester hours in General Office Occupations and 3 semester hours in Introductory Typing (6/78).

The following courses conducted by the Westchester County Office of Employment and Training were evaluated at the Rochambeau CETA Skills Training Center in White Plains, New York, on July 11 and August 31, 1978, but the official course descriptions and credit recommendations were not available when this Supplement went to press. Information on these courses may be obtained from the Program office.

Auto Body Repair
Automotive Repair
Electronics Occupations
Health Care Occupations
Metal Machinery Occupations

SECTION III

INTRODUCTION

This section lists modifications of introductory paragraphs and course exhibits that previously appeared in the 1977 edition of the *Guide*. These modifications have been made as a result of information obtained during the Program's regular re-review process, which seeks to determine if changes have been made in previously evaluated courses and, if so, whether the credit recommendations are still valid. This is one of the ways in which the Program maintains the reliability of the evaluation and credit recommendation system. Anyone who would like to find out if there has been a change in a course or in the organizational information that appeared in the 1977 *Guide* should consult this section of the Supplement.

In those instances where a modification has been required in an organizational introduction or a course exhibit, the entire new introduction or course exhibit has been reprinted here. It is not necessary to refer back to the particular introduction or course exhibit in the 1977 *Guide*. Please note that only course exhibits or introductions from the 1977 *Guide* which have been changed in some way appear in this section. For information on other courses which have received credit recommendations and the organizations which sponsor them, consult both Sections I and II of this publication and the 1977 *Guide*.

AGWAY INC.

Agway Inc. is a farm supply and food marketing cooperative business organization owned by more than 117,000 farmer-member stockholders. The organization serves agriculture in 12 northeastern states. In addition to providing numerous farm production supplies and marketing some of the products raised by its members, Agway is a diversified organization involved in petroleum, insurance, and sales financing. In 1977, total employment was approximately 10,200 persons.

The educational programs and courses offered by Agway for its employees are designed to provide practical training, opportunity for personal development, and opportunity for improved performance and future development. In addition to offering a variety of training and development programs, Agway utilizes an assessment center to help employees formulate career plans and identify educational needs.

Source of official student records: Director of Training, Agway Inc., Training Center, 9 Adler Drive, East Syracuse, New York 13057.

AGWAY INSURANCE

Source of official student records: Administrative Sales Manager—Insurance, Agway Inc., Box 4851, Syracuse, New York 13221.

Agway Management Development Program (Retail Management)

Location: Agway Training Center, East Syracuse, NY, and individual divisional headquarters.

Length: 118 hours (50 weeks); formal classroom sessions and programmed instruction.

Dates: August 1975—Present.

Objective: To provide the student with a general orientation to the field of management as applied to retail operations.

Instruction: Retail management operations including balance sheet, operating statement, credit and accounts receivable, control of cash, inventory management, personnel, services, grain marketing, merchandising, production and distribution, and wage and salary; managerial functions (planning, organizing, directing, coordinating, and controlling); affirmative action accountability, financing, leadership development, leadership styles, management by goals, and motivation; advertising and sales promotion.

Credit recommendation: In the lower division baccalaureate/associate degree category, 3 semester hours in Retail Management (11/75).

AMERICAN INSTITUTE OF BANKING
BUFFALO CHAPTER

Agricultural Finance (FIN 232)

(Formerly Agriculture Finance [FIN 532])

Length: 45 hours (15 weeks).

Dates: January 1969—December 1971.

Objective: To familiarize the student with the characteristics of agriculture as an industry and with the principles and practices used in the extension of credit to farmers.

Instruction: Livestock and poultry financing; crop financing; capital loans; agribusiness; management of the farm loan portfolio; business development; sources of agricultural information.

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 3 semester hours in Agricultural Economics (1/75).

Agriculture Finance (FIN 532)

Refer to Agricultural Finance (FIN 232).

Bank Management by Objectives (MGT 304)

(Formerly Bank Management by Objectives [MGT 504])

Length: 20 hours (8 weeks).

Dates: January 1970—Present.

Objective: To provide the student with an understanding of the principles of management by objectives.

Instruction: Basic concepts of management by objectives using the case method approach. (Prerequisite: a course in management organization theory or the equivalent.)

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 1 semester hour in Business Administration or Management (2/75).

Bank Public Relations and Marketing (BUS 226)

Refer to Marketing for Bankers (BUS 205).

BankSim (MGT 312)

(Formerly Management Policies for Commercial Banks [MGT 511])

Length: 48 hours (12 weeks).

Dates: January 1974—Present.

Objective: To provide the student with an understanding of the concepts, functions, and structure of the banking organization in relation to policy formulation.

Instruction: Determination of the function and structure of commercial banking. Risk; capital management; deposit and liquidity management; lending and investment function; auditing; personnel function; marketing and management of commercial bank funds. A computerized commercial bank management simulation game is part of the course.

Credit recommendation: In the upper division baccalaureate category, 3 semester hours in Business Administration or Management (2/75).

Business Financial Management (FIN 231)

(Formerly Corporate Finance [FIN 531])

Length: 45 hours (15 weeks).

Dates: January 1973—Present.

Objective: To develop an understanding of the ways in which businesses finance their incorporation and continuing operations.

Instruction: The nature, functions, and management of the corporation; sources of financing; efficient utilization of funds by corporations; management of assets and liabilities; cost of capital; capital structure, present value, and capital budgeting; consideration of external economic forces that influence the corporation finance process. Emphasis on qualitative and quantitative tests as applied to corporate financial performance.

Credit recommendation: In the upper division baccalaureate category, 3 semester hours in Finance (2/75).

Commercial Lending (FIN 239)

(Formerly Commercial Lending [FIN 539])

Length: 30 hours (12 weeks).

Dates: October 1973—Present.

Objective: To teach the student management skills in the lending procedure.

Instruction: The loan interview; loan decisions and techniques; documentation for the credit file; problem loans; managing the loan portfolio. Course material is presented through workshops and case study problems.

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 2 semester hours in Banking, Finance, or Management (1/75).

Commercial Lending I & II (FIN 237 & 238)

(Formerly Lending I & II [FIN 536])

Length: 36 hours (12 weeks).

Dates: February 1972—Present.

Objective: To present a case study approach to commercial loan analysis.

Instruction: Commercial loan principles and operations; credit and credit policy; analysis of financial statements; ratios and comparative analysis; analysis of the ability to generate cash.

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 2 semester hours in Finance (1/75).

Corporate Finance (FIN 531)

Refer to Business Financial Management (FIN 231).

Credit Administration (FIN 206)

(Formerly Credit Administration [FIN 534])

Length: 45 hours (15 weeks).

Dates: January 1971—Present.

Objective: To provide the student with a basic understanding of credit administration.

Instruction: The principles of credit and loan administration. Working capital loans; secured loans; term loans; real estate loans; credit investigation; the responsibilities of the bank lending officer.

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 3 semester hours in Banking, Finance, or Management (1/75).

Home Mortgage Lending (FIN 207)

(Formerly Home Mortgage Lending [FIN 235])

Length: 45 hours (15 weeks).

Dates: January 1968—Present.

Objective: To provide the student with an overview of the home mortgage investment area of savings and commerical banks; to provide an understanding of the mortgage market and the operations of the mortgage department.

Instruction: An introduction to the mortgage field; the mortgage market; the mortgage portfolio; appraisal; credit analysis; legal aspects; the processing and servicing of the mortgage.

Credit recommendation: In the lower division baccalaureate/associate degree category, 3 semester hours in Banking or Finance (1/75).

Instalment Credit (FIN 236)

Refer to Introduction to Bank Lending (FIN 200).

Introduction to Bank Lending (FIN 200)

(Formerly Instalment Credit [FIN 236])

Length: 45 hours (15 weeks).

Dates: January 1968—December 1976.

Objective: To provide the student with basic knowledge of instalment credit and its administration.

Instruction: Instalment credit; the techniques of instalment lending; establishing credit; obtaining and checking information; servicing the loan and collecting the amounts due; inventory financing; special loan programs; business development and advertising; the public relations aspect of instalment lending.

Credit recommendation: In the lower division baccalaureate/associate degree category, 3 semester hours in Banking or Finance (1/75).

Introduction to Business (BUS 121)

Refer to Introduction to Economics and Business (ECO 140).

Introduction to Economics and Business (ECO 140)

(Formerly Introduction to Business [BUS 121])

Length: 45 hours (15 weeks).

Dates: January 1970—Present.

Objective: To provide the student with an overview of business organizations in a free enterprise system.

Instruction: A general overview of the types and structures of business organizations; the marketing function; the legal and regulatory environment; business and society; personnel administration and labor relations; production and finance.

Credit recommendation: In the lower division baccalaureate/associate degree category, 3 semester hours in Business Administration (2/75).

Lending I & II (FIN 536)

Refer to Commercial Lending I & II (FIN 237 & 238).

Loan and Discount (FIN 203)

(Formerly Loan and Discount [FIN 237])

Length: 45 hours (15 weeks).

Dates: October 1974—Present.

Objective: To train bank personnel in the function performed by the discount (note) teller.

Instruction: Essential elements of the loan and discount function. Promissory notes; discounting commercial paper; guarantees; collateral agreements; notes secured by stocks, bonds, and savings accounts passbooks; the concepts of attachments perfection, priority, default, and foreclosure.

Credit recommendation: In the vocational certificate category, 3 semester hours in Banking (1/75).

Management Policies for Commercial Banks (MGT 511)

Refer to BankSim (MGT 312).

Managerial Accounting (ACC 113)

(Formerly Managerial Accounting [ACC 513])

Length: 45 hours (15 weeks).

Dates: January 1972—Present.

Objective: To provide the student with an understanding of the interpretation of accounting data in the planning and managing of business activities.

Instruction: Structure, concepts, and process of accounting; preparation, analysis, and use of financial statements; techniques for measuring assets, liabilities, equity, income, and expenses; use of accounting data for budgetary planning and control systems.

Credit recommendation: In the lower division baccalaureate/associate degree category, 3 semester hours in Accounting or Business Administration (2/75).

Marketing for Bankers (BUS 205)

(Formerly Bank Public Relations and Marketing [BUS 226])

Length: 45 hours (15 weeks).

Dates: January 1968—Present.

Objective: To provide the student with an understanding and appreciation of the public relations and marketing function in banking.

Instruction: The basics of internal and external bank public relations. Function and structure of bank public relations and marketing; staff; internal communications; publicity; advertising; marketing; selling; the officer call program; community relations; relations with competitors.

Credit recommendation: In the lower division baccalaureate/associate degree category, 3 semester hours in Marketing or Public Relations (1/75).

Principles and Techniques of Management (MGT 308)

(Formerly Principles and Techniques of Management [MGT 506])

Length: 16 hours (8 weeks).

Dates: January 1973—Present.

Objective: To provide the student with an understanding of management organization and theory in relation to techniques of setting performance standards and conducting the appraisal interview.

Instruction: Management theory in relation to writing position descriptions, setting standards of performance, and the performance appraisal interview. Course is designed around case problems, role playing, filmed case studies, and filmed and live lectures.

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 1 semester hour in Business Administration or Management (2/75).

Principles of Bank Operations Advanced (BNK 104)

(Formerly Principles of Bank Operations Advanced [BNK 504])

Length: 30 hours (15 weeks).

Dates: January 1973—Present.

Objective: To provide the beginning banker with a broad perspective of banking operations necessary for career development.

Instruction: Accelerated version of Principles of Bank Operations (BNK 101) designed for the management trainee. The economic importance of banks; the receiving function; bookkeeping operations; collection services; legal relations with depositors; negotiable instruments; savings and time deposit function; management of bank funds; internal controls; commercial bank services.

Credit recommendation: In the vocational certificate category, 2 semester hours in General Business (1/75).

Principles of Real Estate (FIN 540)

Refer to Real Estate Finance (FIN 240).

Principles of Real Estate Appraisal (FIN 241)

(Formerly Principles of Real Estate Appraisal [FIN 541])

Length: 30 hours (15 weeks).

Dates: January 1974—Present.

Objective: To provide the student with basic knowledge of real estate valuation.

Instruction: Introduction to real estate appraising. Cost, market, and income approaches to value; preparing the appraisal report.

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 2 semester hours in Business Administration (2/75).

Real Estate Finance (FIN 240)

(Formerly Principles of Real Estate [FIN 540])

Length: 30 hours (15 weeks).

Dates: January 1973—Present.

Objective: To provide the student with a sound foundation in real estate theories and practices.

Instruction: Introduction to real estate theories and practices. The real estate market; contracts; property ownership; financing; brokerage; valuation; government operations and urban development.

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 2 semester hours in Business Administration (2/75).

Savings Bank Life Insurance (BNK 208)

(Formerly Savings Bank Life Insurance [BNK 506])

Length: 16 hours (8 weeks).

Dates: October 1971—Present.

Objective: To prepare students for the New York State Life Insurance Examination necessary to be licensed; to provide the student with a fundamental understanding of the life insurance industry.

Instruction: Principles of life insurance. Types of life insurance; policy contracts; nonforfeiture; settlement options; legal aspects; types of insurance plans; the need for qualified advice.

Credit recommendation: In the vocational certificate category, 1 semester hour in Insurance (1/75).

Trust Functions and Services (BNK 206)

(Formerly Trust Functions and Services [BNK 503])

Length: 30 hours (15 weeks).

Dates: January 1971—Present.

Objective: To provide the student with an understanding of the services rendered by institutions engaged in the trust business; to provide an introduction to the functions and services of a corporate fiduciary.

Instruction: Historical background of trust services and institutions; government supervision; specific service functions (property, wills, estates, employee trust, pension trust, institutional trust).

Credit recommendation: In the upper division baccalaureate category, 2 semester hours in Banking or Business Law (1/75).

AMERICAN INSTITUTE OF BANKING ROCHESTER CHAPTER

Business Communication by Letter and Memo

Location: Various area bank and college facilities.

Length: 45 hours (15 weeks).

Dates: September 1974—Present.

Objective: To enable the student to become more proficient at writing business letters, memos, and reports.

Instruction: Fundamental principles underlying modern business correspondence; types of letters; business reports; form letters; oral communication and effective listening; good will letters.

Credit recommendation: In the lower division baccalaureate/associate degree category, 3 semester hours in Business Administration or Business Communication (5/77).

Principles of Economics

Location: Various area bank and college facilities.

Length: 45 hours (15 weeks).

Dates: September 1967—Present.

Objective: To provide the student with knowledge of the theory and practical application of the basic concepts of economics.

Instruction: Survey of basic economics concepts, with emphasis on macroeconomic theory. Macroeconomic concepts; major economic problems (unemployment, inflation, technological change, and the business cycle); measurement of economic inputs and outputs; money and economic growth; money and the banking system; the Federal Reserve System; money and taxation.

Credit recommendation: In the lower division baccalaureate/associate degree category, 3 semester hours in Economics (5/77).

AMERICAN TELEPHONE AND TELEGRAPH COMPANY

TRAINING RESEARCH GROUP

Source of official student records: Training Research Group—Key Instructor, American Telephone and Telegraph Company, 295 North Maple Avenue, Room 3136B1, Basking Ridge, New Jersey 07920.

AMERICAN TELEPHONE AND TELEGRAPH COMPANY LONG LINES

MANAGEMENT RESOURCE CENTER—NEW YORK CITY

Source of official student records: Director of Training, Management Resource Center, Room 2300, AT&T Long Lines, 32 Avenue of the Americas, New York, New York 10013.

Communications Workshop (H101)

(Formerly Communications Workshop [M101])

Location: Management Resource Center, 32 Avenue of the Americas, New York, NY.

Length: 40 hours (1 week).

Dates: June 1975—Present.

Objective: To enable the student to develop effective communications skills.

Instruction: Methods of effective communication; understanding and resolving communications barriers; importance of listening and utilizing feedback. The course includes lecturettes, body language games, problem-solving activities, skill building games in listening, perceptual awareness activities, simulations, and other structured activities.

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 3 semester hours in Individual Behavior in Small Groups (2/76).

Effective Speaking Seminar (H116)

(Formerly Effective Speaking Seminar)

Location: Management Resource Center, 32 Avenue of the Americas, New York, NY.

Length: 47 hours (6 days).

Dates: February 1975—Present.

Objective: To enable the student to increase his/her oral communication skills by eliminating or minimizing technical barriers to effective communications, sharpening listening skills and refining conversational skills.

Instruction: Barriers and aids to effective listening; active and interactive listening skills; conversational skills; impromptu and prepared speeches; organization of a successful talk; nonverbal communication; syllabication; components of voice mechanism and proper placement for production of phonemes; vocal quality, flexibility, and projection; discussion of vowels, consonants, and combination vowels. The course consists of a combination of lecture, discussion, language laboratories, films, role-plays, programmed instruction, and analysis of audio tapes of students' presentations.

Credit recommendation: In the lower division baccalaureate/associate degree category, 3 semester hours in Communications, Public Speaking, or Speech and Theatre (5/77).

Managing at the First Level (H136)

(Formerly Managing at the First Level [M136])

Refer to New Supervisory Training (M105).

Managing Managers (H210)

(Formerly Managing Managers [M210])

Location: Management Resource Center, 32 Avenue of the Americas, New York, NY.

Length: 32 hours (4 days).

Dates: February 1975—Present.

Objective: To assist second-level managers in developing key managerial skills required to perform their job functions effectively.

Instruction: The role of a second-level manager; delegation of responsibility; management appraisal plan; leadership styles; problem solving and decisionmaking; time management; objective setting (management by objective); motivation; subordinate development. Lecture/discussions and various role-play activities are used to develop skills.

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 3 semester hours in Behavioral Science or Management (2/76).

1. New Supervisory Training (M105)

2. Managing at the First Level (H136)

(Formerly Managing at the First Level [M136])

Location: Management Resource Center, 32 Avenue of the Americas, New York, NY.

Length: 1. 80 hours (2 weeks).
2. 32 hours (4 days).

Dates: 1. January 1975—June 1976.
2. January 1975—Present.

Objective: To improve the effectiveness of new first-level managers through increased knowledge of management practices and to orient them to company practices.

Instruction: Course 1: Fundamentals and applications of management practices (salary administration, labor relations, absence control, personnel practices and appraisal); overview of the organization and functions of the various departments within the company. Approximately one-third of the course is devoted to labor-management relations. Course format consists of lectures, discussions, films, and role plays. **Course 2:** Fundamentals of supervision and management practices. Management by objectives; time management; problem solving; motivation (Maslow, Herzberg, work itself/job enrichment); leadership styles (McGregor's Theory X-Theory Y, Blake's managerial grid); appraisal feedback; subordinate development. The course consists of lectures, discussions, individual tasks, and group exercises.

Credit recommendation: In the lower division baccalaureate/associate degree category, 3 semester hours in Basic Management (2/76). NOTE: Courses 1 and 2 must both be completed to receive full credit. If Course 2 is taken alone, 2 semester hours are recommended.

Vocational Instructor Training (E116)

(Formerly Vocational Instructor Training [M129])

Location: Management Resource Center, 32 Avenue of the Americas, New York, NY.

Length: 32 hours (4 days).

Dates: January 1975—Present.

Objective: To enable the student to develop the skills needed to make effective presentations.

Instruction: Instructional objectives; four-step teaching process; lesson plans; use of visual aids; measuring teaching effectiveness. Video-taped presentations by the participants on a variety of assigned and selected instruction-related topics are used to teach the material and to provide a basis for critical discussion by the other participants and the course leader.

Credit recommendation: In the lower division baccalaureate/associate degree category, 2 semester hours in Oral Communication (2/76).

ARTHUR ANDERSEN & CO.

Arthur Andersen & Co. is a worldwide firm of independent auditors and accountants. It includes 53 operating offices in the United States and Puerto Rico and 63 offices located in 37 other countries, in which there are more than 1,000 partners and 11,000 professional employees.

The firm conducts diverse technical training required for the professional development of its personnel in the audit, tax, and administrative services divisions, as well as for the development of technical competence in dealing with problems unique to specialized industries. The courses include such topics as accounting and auditing, taxation, managerial skills development, reporting to regulatory bodies, and highly technical instruction on computers and systems installation. All personnel, from newly employed staff to experienced partners, participate in these courses at levels of complexity commensurate with their responsibilities, experience, and needs. Approximately half of the training is conducted in the operating offices, primarily using centrally prepared course materials, and the balance at the firm's Center for Professional Development in St. Charles, Illinois.

Source of official student records: Director of Training, Arthur Andersen & Co., Center for Professional Development, 1405 North Fifth Avenue, St. Charles, Illinois 60174.

BERNARD FINESON DEVELOPMENTAL CENTER

The Cerebral Palsied Mentally Retarded and Physically Handicapped Individual (3).

Refer to Habilitation of the Cerebral Palsied Mentally Retarded and Physically Handicapped Individual (3).

Community Living for Retarded Adults (8)

(Formerly Preparation in Community Living for Retarded Adults [8])

Location: Corona Unit, Corona, NY; Glen Oaks Unit, Creedmoor State Hospital, Queens Village, NY; Howard Park Unit, Howard Beach, NY.

Length: 30 hours (15 weeks).

Dates: February 1976—Present.

Objective: To explore practical problems involving the emotional, intellectual, social, and physical needs of mentally retarded adolescents and adults.

Instruction: Health problems; adolescent problems; education and training; the retarded adult in society; community resources; living arrangements; adult sexuality; a view of the future.

Credit recommendation: In the upper division baccalaureate category, 2 semester hours in Behavioral Science, Education, Psychology, or Sociology (4/76).

Current Theory in Severe and Profound Mental Retardation: Survey for Professionals (2)

(Formerly Current Theory in the Disorder of the Severe and Profound Mentally Retarded Individual [2])

Location: Corona Unit, Corona, NY; Glen Oaks Unit, Creedmoor State Hospital, Queens Village, NY; Howard Park Unit, Howard Beach, NY.

Length: 30 hours (15 weeks).

Dates: February 1976—Present.

Objective: To provide a survey of current knowledge of mental retardation, including physical, social, and emotional aspects.

Instruction: History of mental retardation; definition of terms; etiology of mental retardation; labor and delivery; normal developmental milestones; neurologic examinations; neuropsychologic assessment; behavior modification; learning disabilities; seizures; common orthopedic problems; impact of mental retardation on the family.

Credit recommendation: In the upper division baccalaureate category, 2 semester hours in Behavioral Science (4/76).

Current Theory in the Disorder of the Severe and Profound Mentally Retarded Individual (2)

Refer to Current Theory in Severe and Profound Mental Retardation: Survey for Professionals (2).

Habilitation of the Cerebral Palsied Mentally Retarded and Physically Handicapped Individual (3)

(Formerly The Cerebral Palsied Mentally Retarded and Physically Handicapped Individual [3])

Location: Corona Unit, Corona, NY; Glen Oaks Unit, Creedmoor State Hospital, Queens Village, NY; Howard Park Unit, Howard Beach, NY.

Length: 30 hours (15 weeks).

Dates: February 1976—Present.

Objective: To provide a knowledge of the developmental approach to physical habilitation and communication skills.

Instruction: The developmental approach to the physical habilitation, sensory stimulation, and communication skills of severely and profoundly mentally retarded, physically handicapped individuals. Skills taught include techniques of handling, positioning, ambulation, adaptive equipment, sensory stimulation, and language therapy. Emphasis is on experiential and demonstrative training.

Credit recommendation: In the lower division baccalaureate/associate degree category, 2 semester hours in Behavioral Science or Education (4/76).

The Interdisciplinary Treatment Plan for Direct Care Personnel Working With the Severely and Profoundly Mentally Retarded Client (4)

Refer to The Interdisciplinary Treatment Plan for Direct Care Personnel Working With the Severely and Profoundly Retarded Individual (4).

The Interdisciplinary Treatment Plan for Direct Care Personnel Working With the Severely and Profoundly Retarded Individual (4)

(Formerly The Interdisciplinary Treatment Plan for Direct Care Personnel Working With the Severely and Profoundly Mentally Retarded Client [4])

Location: Corona Unit, Corona, NY; Glen Oaks Unit, Creedmoor State Hospital, Queens Village, NY; Howard Park Unit, Howard Beach, NY.

Length: 30 hours (15 weeks).

Dates: February 1976—Present.

Objective: To provide direct care trainees with an overview of the functions of the interdisciplinary team.

Instruction: The role of each discipline as a specialization and the cooperative integration of discipline functions to provide an individualized treatment plan for the client. The competencies surveyed include occupational therapy, physical therapy, neurodevelopmental feeding, communication skills, recreation, movement therapy, social work, psychology, and medicine relevant to the severely and profoundly mentally retarded individual.

Credit recommendation: In the lower division baccalaureate/associate degree category, 2 semester hours in Behavioral Science (4/76).

The Interdisciplinary Treatment Plan: Overview for Professionals of Current Approaches in the Interdisciplinary Management of Severely and Profoundly Mentally Retarded Individuals (5)

Refer to The Interdisciplinary Treatment Team: Overview for Professionals of Current Approaches in the Interdisciplinary Management of Severely and Profoundly Mentally Retarded Individuals (5).

The Interdisciplinary Treatment Team: Overview for Professionals of Current Approaches in the Interdisciplinary Management of Severely and Profoundly Mentally Retarded Individuals (5)

(Formerly The Interdisciplinary Treatment Plan: Overview for Professionals of Current Approaches in the Interdisciplinary Management of Severely and Profoundly Mentally Retarded Individuals [5])

Location: Corona Unit, Corona, NY; Glen Oaks Unit, Creedmoor State Hospital, Queens Village, NY; Howard Park Unit, Howard Beach, NY.

Length: 30 hours (15 weeks).

Dates: February 1976—Present.

Objective: To provide health care professionals and special educators with knowledge of contemporary approaches to the treatment of the severely and profoundly mentally retarded client.

Instruction: Theoretical principles and practices used by supervisors of interdisciplinary teams. Occupational therapy; physical therapy; feeding; communication skills; movement therapy; nursing; psychology; social work; medicine.

Credit recommendation: In the upper division baccalaureate category, 2 semester hours in Behavioral Science (4/76).

Preparation in Community Living for Retarded Adults (8)

Refer to Community Living for Retarded Adults (8).

CHAUTAUQUA INSTITUTION

Chautauqua Institution, founded in 1874, is located on 700 acres near the head of Chautauqua Lake in southwestern New York State. It is a residential community, a summer resort colony, and an educational institution.

The Chautauqua Summer School was established soon after the founding and is believed to be the oldest summer school in the United States. Chautauqua's educational aim is to provide creative opportunities for people of all ages with varing interests. Full dance and theatre programs are held, in addition to arts and crafts courses and special-interest topics. Advanced music training and professional studies for teachers complete the offerings.

Course offerings of the Summer School are augmented by many artistic, intellectual, and religious discussions and programs. These are easily accessible to all and occur daily throughout the nine-week season. Included are frequent resident symphony orchestra concerts and concerts by renowned international artists, a recital series, an art gallery and annual art festival, opera company and repertory theatre productions, a film theatre, and daily lectures, discussions, and sermons on a wide variety of topics.

Source of official student records: Registrar, Summer School Office, Box 28, Chautauqua Institution, Chautauqua, New York 14722.

SCHOOL OF MUSIC

Interpretation Classes (M213)

(Formerly Interpretation Classes M216, M214)

Refer to Piano Literature.

Master Classes (M214)

(Formerly Master Classes M217, M213)

Refer to Piano Literature.

Orchestral Instruments—Individual Instruction

17. Violin (M294-M297, M268-M271)

Piano Literature

1. **Interpretation Classes (M213)**
   (Formerly Interpretation Classes M216, M214)
2. **Master Classes (M214)**
   (Formerly Master Classes M217, M213)

Location: Chautauqua Institution, Chautauqua, NY.

Length: 1. 14 hours (7 weeks).
2. 21 hours (7 weeks).

Dates: June 1976—Present.

Objective: To provide the student with a comprehensive survey of piano literature from the Baroque period through the Romantic and early contemporary periods.

Instruction: Live performances by concert performers and exceptional students of the major works of some 20 composers, accompanied by a discussion of their form and interpretation. The major works include those of Bach, Haydn, Mozart, Beethoven, Brahms, Schumann, Chopin, and Liszt.

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 1 semester hour in Piano Literature (8/76). NOTE: Credit should be awarded before the end of the second year following completion of a course. Courses 1 and 2 must both be completed to receive credit.

SPECIAL INTEREST OFFERINGS

Writers' Workshop

Part 1: Poetry Section (483P, S470)
Part 2: Fiction Section (483F, S468)

Location: Chautauqua Institution, Chautauqua, NY.

Length: **Part 1, Version 1:** 15 hours (3 weeks).
Part 1, Version 2: 15 hours (2 weeks).
Part 2, Version 1: 15 hours (3 weeks).
Part 2, Version 2: 15 hours (2 weeks).

Dates: **Version 1:** June 1975—February 1977.
Version 2: March 1977—Present.

Objective: Part 1: To increase the student's knowledge of poetry and ability to write it. **Part 2:** To increase the student's knowledge of fiction and ability to write it.

Instruction: Part 1: Study and practice of the basic tools of poetry. Emphasis is on the student's own poetry, either work in progress or newly created during the course. Students work on their poetry outside of class and receive written critiques from the instructor, comments from the class, and a minimum of one hour of conference time. **Part 2:** Classroom lectures concentrate on plot, character development, and forms of the short story. Emphasis is on the student's own writing, either work in progress or newly created during the course. Students work outside of class and receive written critiques from the instructor, comments from the class, and a minimum of one hour of manuscript conference time.

Credit recommendation: Part 1: In the lower division baccalaureate/associate degree category, 1 semester hour in Independent Study in Poetry (8/76). **Part 2:** In the lower division baccalaureate/associate degree category, 1 semester hour in Independent Study in Fiction (8/76). NOTE: Credit should be awarded before the end of the second year following completion of a course.

CITY OF ALBANY DEPARTMENT OF HUMAN RESOURCES

Life Management Skills

Location: Human Resource Center, North Lake and Central Avenues, Albany, NY; Adult Learning Center, 222 South Pearl Street, Albany, NY.

Length: 21 hours (3 days).

Dates: December 1974–May 1978.

Objective: To enable the participant to develop greater self-awareness, a more positive self-image, an understanding of the needs, values, strengths, and goals of others; to enhance the participant's employability skills.

Instruction: Two-day human potential workshop during which participants have an opportunity to discover, share, and reinforce their strengths, assets, values, successes, needs, and goals. One-day workshop on employability skills during which participants consider career alternatives, employer expectations, communications, and interviewing skills. The course format includes small group discussion, videotaped practice interviews, and role-play exercises.

Credit recommendation: In the lower division baccalaureate/associate degree category, 1 semester hour in Human Services, Psychology, Social Sciences, or Sociology (4/77).

CITY OF YONKERS POLICE DEPARTMENT

INCENTIVE TRAINING PROGRAM

Criminal Investigation

Location: Special Operations Division Building, Yonkers, NY.

Length: 45 hours (15 weeks).

Dates: September 1976—March 1978.

Objective: To provide the student with an understanding of the theory and practice of criminal investigation.

Instruction: General investigative procedures; types, importance, and protection of physical evidence; interviews, interrogations, and confessions; surveillance techniques; history and classification of fingerprints; the penal law relating to criminal investigations; investigation of specialized crimes, including arson and homicide. Particular emphasis is placed on the United States Constitutional limitations in the areas of search and seizure, probable cause to arrest, lineups, and right to counsel. Use of lecture, discussion, and practical exercises.

Credit recommendation: In the upper division baccalaureate category, 3 semester hours in Criminal Justice or Criminal Science (10/76).

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.

MANAGEMENT AND PROFESSIONAL DEVELOPMENT GROUP

Clear Concise Business Writing (HRIS-8819)

(Formerly Effective Writing Workshop [STC 11, 8100])

Location: Training facilities throughout the company.

Length: 32 hours (4 weeks); additional 28 hours of independent study and programmed instruction.

Dates: July 1973—Present.

Objective: To enable the student to achieve organization, clarity and conciseness in business correspondence and report writing, including technical reports, through the application of specific techniques and editing skills.

Instruction: An intensive course in editing designed to save and strengthen use of words and to make business writing clearer and more concise. Besides editing techniques, eight English points are reviewed, after which the students complete a "language checkup." Self-study English lessons are recommended when needed. The course includes daily written exercises (report excerpts) to teach individual editing techniques, a summary report (rewritten with students working in teams), and a 250–300 word report which is submitted near the end of the course for team editing and final approval.

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 3 semester hours in Business, Business Education, or Engineering (9/75).

Effective Writing Workshop (STC 11, 8100)

Refer to Clear Concise Business Writing (HRIS-8819).

EASTMAN KODAK COMPANY

Instructional Process Workshop

Location: Marketing Education Center, Rochester, NY; Marketing Education Center, San Francisco, CA.

Length: Individualized program combining lecture, laboratory, and independent study (35–50 hours).

Dates: May 1973—Present.

Objective: To develop basic teaching skills for marketing education specialists in preparation for their first training assignments.

Instruction: Basic course in instructional technology, with an introduction to educational psychology, learning theory, and instructional strategies. Objectives; learning strategy; adult learning principles; developing a teaching plan; developing teaching materials; educational development process; media production process; logistical support process; presentation techniques; evaluation.

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 3 semester hours in Education (5/74).

FAMILY DAY CARE TRAINING CENTER AT RED HOOK

Refer to Red Hook Family Day Care Training Center of New York.

FEDERAL AVIATION ADMINISTRATION

AIRWAY FACILITIES TRAINING PROGRAM

1. Air Conditioning (40114)
2. Air Conditioning (44106)

Location: 1. FAA Academy, FAA Aeronautical Center, Oklahoma City, OK.
2. Correspondence.

Length: 1. 120 hours (3 weeks).
2. Directed study (approximately 30 hours).

Dates: May 1969—Present.

Objective: To train personnel responsible for the installation, maintenance, and repair of air conditioning units of a maximum capacity of 10 tons.

Instruction: Basic terminology and principles of air conditioning. Safety precautions; function of components and controls of air conditioning systems used by the FAA; interpretation and utilization of enthalpy diagrams and psychrometric charts; interpretation of electrical diagrams of major FAA air conditioning systems; selection of refrigerant piping and accessories; operation and use of associated test equipment and tools; maintenance and servicing procedures. (Prerequisite: Electrical Principles 40100.)

Credit recommendation: In the lower division baccalaureate/associate degree category, 3 semester hours in Air Conditioning and Heating (1 lecture, 2 laboratory) (7/75). NOTE: Courses 1 and 2 must both be completed to receive credit.

FAA equivalent: Course 1: FC-250 or 40104 Air Conditioning or FC-272 Advanced Air Conditioning. **Course 2:** 44114 Air Conditioning (directed study).

GENERAL ELECTRIC COMPANY

ADVANCED COURSE IN ENGINEERING

The Advanced Course in Engineering was originally established in 1923 to supply the General Electric Company with engineers having sufficient breadth and depth of technical understanding to make basic contributions in the development of new or improved products. The overall objectives of the course are to increase the abilities of the recent technical college graduate to:

- Analyze and evaluate engineering problems as to both their significance and the appropriate economic and technical approach to their solution,
- Apply effectively the advanced principles of physics, mathematics, and engineering technology to the solution of actual engineering problems,
- Present the solutions clearly and concisely in terms of conclusions and recommended action.

The Advanced Course is a 3-1/2-year program consisting of the company-taught A-, B-, and C-Courses and periods of formal academic study on campus. The course material is continuously reviewed, revised, and updated. It includes pertinent basics, state-of-the-art analytical techniques, and topical emphasis relative to changing business needs and products. Graduates of the program may earn the Company's Advanced Course certificate.

The A-Course is taught with basic uniformity at the 11 General Electric locations at which it is conducted, and the credit recommendation for that course applies to all those locations. The B- and C-Courses treat subject areas that have special applications to each plant, and the credit recommendations established for those two courses apply only to the locations indicated.

Source of official student records: Manager, Advanced Course in Engineering, Professional Education Operation, Building 36, Room 515, Schenectady, New York 12345.

A-Course

Location: Aerospace Controls & Electronics Systems Department, Binghamton, NY; Aerospace Electronic Systems Products Department, Utica, NY; Aircraft Engine Group, Evendale, OH; Aircraft Engine Group, Lynn, MA; Armament Systems Products Department, Burlington, VT; Heavy Military Equipment Department, Syracuse, NY; Medical Systems Business Division, Waukesha, WI; Nuclear Energy Products Division, San Jose, CA; Professional Education Operation, Schenectady, NY; Re-entry and Environmental Systems Division, Valley Forge, PA; Transportation Systems Business Division, Erie, PA.

Length: 136 hours (34 weeks); approximately 680 hours are devoted to problem solving outside of class.

Dates: January 1965—Present.

Objective: To develop the ability to solve engineering development and design problems.

Instruction: Engineering analysis (application of mathematical techniques to many technical areas). Vibrational analysis; E&M fields; control theory; probability and random variables; heat transfer; structure analysis. Assigned problems support the classwork, are completed outside of class, and are submitted to the instructor for review.

Credit recommendation: In the graduate degree category, 12 semester hours in Engineering Analysis or Engineering Science (or 4 semester hours in Applied Mathematics) (6/75). NOTE: The course is broadly interdisciplinary in nature and may not be sufficiently specialized for full credit in highly specialized degree programs.

B-Course

Location: Aerospace Controls and Electronics Systems Department, Binghamton, NY (1/70—12/74 only); Aerospace Electronics Systems Products Department, Utica, NY; Heavy Military Equipment Department, Syracuse, NY.

Length: Version 1: 64 hours (16 weeks); approximately 320 hours are devoted to problem solving outside of class.

Version 2: 112 hours (28 weeks); approximately 480 hours are devoted to problem solving outside of class.
Dates: **Version 1:** January 1970—December 1975.
Version 2: January 1976—Present.

Objective: To teach classical communications theory with emphasis on selected current engineering problems.

Instruction: **Versions 1 and 2:** Amplitude, frequency, and digital modulation schemes; information theory; hypothesis testing; parametric estimation; Kalman filtering; radar design. Assigned problems support the classwork, are completed outside of class, and are submitted to the instructor for review. **Version 2:** Also includes: probability theory and stochastic processes; Hilbert transforms and complex envelope; extended information theory concepts; electro-optics; statistical detection theory; sonar techniques; electronic countermeasures.

Credit recommendation: **Version 1:** In the graduate degree category, 6 semester hours in Communications Theory and Systems (6/75). **Version 2:** In the graduate degree category, 12 semester hours in Communications Theory and Systems (8/76).

GRUMMAN CORPORATION

GRUMMAN AEROSPACE CORPORATION

Communication and Motivation (EE 01540)

(Formerly Communication and Motivation [EE 01239])

Location: Bethpage, NY; other company locations throughout the United States.

Length: 36 hours (13 weeks).

Dates: January 1970—Present.

Objective: To provide the student with behavioral science approaches in the areas of motivation and communication.

Instruction: Behavioral science research and its implications for the management process; the impact of assumptions; achievement motivation; interpersonal communication skill; management styles, both individual and corporate; job enrichment; the process of effective listening.

Credit recommendation: In the upper division baccalaureate category, 2 semester hours in Behavioral Science (7/75).

Computer Programming, COBOL (FF 01547)

(Formerly Computer Programming, COBOL [FF 00001])

Location: Bethpage, NY; other company locations throughout the United States.

Length: 37½ hours (15 weeks).

Dates: January 1976—Present.

Objective: To teach the student how to design, code, and debug COBOL programs, and methods of solving data processing problems using COBOL.

Instruction: Review of data processing concepts. Computer programming with COBOL, with emphasis on the divisional makeup of the COBOL language; identification; environment; data; procedure

Credit recommendation: In the lower division baccalaureate/associate degree category, 3 semester hours in Business Data Processing (2/76).

Computer Programming, FORTRAN (FF 01548)

(Formerly Computer Programming, FORTRAN [FF 00002])

Location: Bethpage, NY; other company locations throughout the United States.

Length: 36 hours (15 weeks).

Dates: January 1976—Present.

Objective: To provide the student with knowledge needed to express computational problems in the FORTRAN language.

Instruction: Introduction to the digital computer and its basic programming concepts utilizing FORTRAN IV, logic, and flow charting; computer applications, limitations, and the functions of its major components. Use of structured problem solving.

Credit recommendation: In the lower division baccalaureate/associate degree category, 3 semester hours in Computer Programming (2/76).

Computers: A Managerial Tool (FF 01549) (Management Information System)

(Formerly Computers: A Managerial Tool [FF 01021])

Location: Bethpage, NY; other company locations throughout the United States.

Length: 36 hours (15 weeks).

Dates: January 1976—Present.

Objective: To provide the student with an understanding of information processing and computers as they relate to management, operational effectiveness, planning, and organizational change.

Instruction: General concepts and characteristics of the hardware and software components of information processing systems; processes and methodologies related to application development, system procurement, and management. Specific topics include: industry personnel and organization; hardware architecture; input/output devices; resource management; security; computer-aided design; financial modeling; current state-of-the-art and industry trends.

Credit recommendation: In the graduate degree category, 3 semester hours in Management (2/76).

Effective Oral Presentations (FF 01550)

(Formerly Effective Technical Presentations [FF 00019])

Location: Bethpage, NY; other company locations throughout the United States.

Length: 36 hours (18 weeks).

Dates: September 1976—Present.

Objective: To develop the participant's skill in communicating with and motivating an audience.

Instruction: Intellectual, physical, and emotional aspects of oral communication; organization for clarity, impact, and repeatability; motivating and persuading an audience for action; the use of audiovisual aids. To develop the ability to compose and deliver presentations with poise, self-confidence, and effectiveness, students make oral presentations which are evaluated by the class and the instructor.

Credit recommendation: In the lower division baccalaureate/associate degree category, 2 semester hours in Public Speaking (8/76).

Fundamentals of Supervisory Management (EE 01541)

(Formerly Fundamentals of Supervisory Management [EE 00099])

Location: Bethpage, NY; other company locations throughout the United States.

Length: 40 hours (16 weeks).

Dates: March 1967—Present.

Objective: To provide the student with a basic introduction to the management process and to develop understanding of the nature of leadership.

Instruction: Introduction to the nature of management; the process of planning, organizing, and controlling; fundamentals of personality and behavior; motivation and communications; handling complaints and grievances; guiding employees and building job satisfaction and morale.

Credit recommendation: In the lower division baccalaureate/associate degree category, 2 semester hours in Management (7/75).

Introduction to Computer Programming (FF 01546)

(Formerly Introduction to Computer Programming [FF 00003])

Location: Bethpage, NY; other company locations throughout the United States.

Length: 37½ hours (15 weeks).

Dates: January 1976—Present.

Objective: To provide students with knowledge of basic computer concepts and programming techniques prior to language courses.

Instruction: Basic concepts of processing data including: data representation and recording; computer equipment; how the computer is instructed to perform its task; how this tool can assist in problem solving and providing information. Various elements of computer program development: proper problem definition and planning to meet specific objectives; flow charting used to represent the analysis and logical operations necessary to solve the problem; graphic solution then translated into coded instructions in a pseudoprogramming language. Other topics include: record layout design; data organization; systems and program documentation; and operating systems concepts. Exercises and case studies are used.

Credit recommendation: In the lower division baccalaureate/associate degree category, 3 semester hours in Business Data Processing (2/76).

Management I (EE 01542)

(Formerly Management I [EE 01351])

Location: Bethpage, NY; other company locations throughout the United States.

Length: 48 hours (12 weeks).

Dates: March 1975—Present.

Objective: To improve the effectiveness of practicing first-line supervisors through increased knowledge of management practices and the behavioral sciences and their application on the job.

Instruction: Introduction to supervisory management practices; role of the supervisor, including motivation and performance appraisal; personnel and labor relations; the communication process; the manufacturing system, including quality and material control; budgeting. The works of Maslow, McGregor, and Herzberg are studied, and on-the-job applications are planned. Lecture, discussion, case studies, role-play exercises, and small group projects are used.

Credit recommendation: In the lower division baccalaureate/associate degree category, 3 semester hours in Management (7/75).

INTERNATIONAL CLAIM ASSOCIATION

ICA CLAIMS EDUCATION PROGRAM

The ICA Claims Education Program is designed to provide an introduction to life or health insurance and a thorough understanding of claims administration in the life, individual health, and group areas. The program is divided into two courses of study: Course I—Principles of Life (or Health) Insurance and Course II—Life and Health Insurance Claims. The program consists of five parts in all, and a specific examination is given for each part. Only the three parts making up Course II were submitted for review. The program was developed by ICA in cooperation with the Life Office Management Association (LOMA) and is administered by LOMA's Life Management Institute.

Source of official student records: Registrar, Life Management Institute, Life Office Management Association, 100 Colony Square, Atlanta, Georgia 30361.

Life and Health Insurance Law (C2)

(Formerly Life and Health Insurance Law [C1])

Location: Independent study.

Length: Independent study.

Dates: January 1965—Present.

Objective: To provide the student with an understanding of contract law as it affects life, health, and group insurance.

Instruction: Principles of contract law applied to individual and group life and health insurance. Insurable interest; policy holder and beneficiary rights; policy provisions; regulation and taxation.

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 3 semester hours in Business Law or Life and Health Insurance (1/76).

Medical and Dental Aspects of Claims (C1)

(Formerly Medical Aspects of Claims [C2])

Location: Independent study.

Length: Independent study.

Dates: January 1966—Present.

Objective: To provide the claim examiner with knowledge of human anatomy and disease needed to evaluate life and health insurance claims.

Instruction: Introduction to anatomy, physiology, and disorders of the body systems and of the oral cavity and associated structures; dental corrective procedures; basic medical and dental terminology.

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 3 semester hours in the Life Sciences (introductory), Medical Terminology, or Pathophysiology (introductory) (1/76).

Medical Aspects of Claims (C2)

Refer to Medical and Dental Aspects of Claims (C1).

LIFE OFFICE MANAGEMENT ASSOCIATION

The Life Office Management Association (LOMA) is a trade, research, and educational association of life insurance companies operating in the United States, Canada, and a number of other countries. The Association sponsors a variety of programs designed for career development in the life industry. Schools, seminars, and correspondence and independent study courses are conducted in management development, instruction and training, systems training, and communications.

Source of official student records: Registrar, Life Management Institute, Life Office Management Association, 100 Colony Square, Atlanta, Georgia 30361.

LINK, INC.

LINK, Inc., a community counseling and cultural center, is a subcontractor for the Nassau County Department of Drug and Alcohol Addiction. As part of its total services, LINK provides counselor and communication training to help professionals and paraprofessionals. Trainees are given the opportunity to obtain practical experience as part of these programs.

Source of official student records: Director of Training, LINK, Inc., 21 Langdon Place, Lynbrook, New York 11563.

Advanced Communication and Counseling Skills

Location: 27 Hempstead Avenue, Lynbrook, NY.

Length: 62½ hours (25 weeks).

Dates: September 1974—September 1977.

Objective: To provide the student with an in-depth examination of the counseling process.

Instruction: Development of personal counseling techniques and styles through an exploration of the various counseling theories. Extensive use of experiential exercises, including a counseling practicum, video tape feedbacks, and peer critiques. (Prerequisite: Introduction to Communication Skills.)

Credit recommendation: In the upper division baccalaureate category, 2 semester hours in Behavioral Sciences, Communications, Counseling, or Social Work (2/76).

Introduction to Communication Skills

Location: 27 Hempstead Avenue, Lynbrook, NY.

Length: 62½ hours (25 weeks).

Dates: September 1974—September 1977.

Objective: To provide students with basic training in communication and interpersonal skills.

Instruction: Development of effective communication skills, such as building trust relationships, attending behavior, active listening, and nonverbal communication within an affective and cognitive framework. Extensive use of experiential exercises, video tape feedbacks, and peer critiques.

Credit recommendation: In the lower division baccalaureate/associate degree category, 2 semester hours in Behavioral Sciences, Communications, Counseling, or Social Work (2/76).

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LITERACY VOLUNTEERS OF CONNECTICUT, INC.

The Literacy Volunteers of Connecticut is a voluntary organization whose goal is to reduce the number of adult and teenage functional illiterates through an individual tutoring program. It is affiliated with the Literacy Volunteers of America, Inc., which was started in Syracuse, New York, in 1962, and now operates in seven states. The Connecticut organization has 10 local programs, with over 800 volunteer tutors.

All volunteer literacy tutors are required to complete the basic training course "Teacher Training/Tutorial Experience." The course is open to others on a space-available basis. The course is designed to prepare the volunteer to teach basic reading successfully to a functional illiterate on a one-to-one basis, using several techniques.

Source of official student records: State Director, Literacy Volunteers of Connecticut, 55 Elizabeth Street, Hartford, Connecticut 06105.

Teaching Training/Tutorial Experience

Location: Bridgeport, Danbury, Hartford, New London, Norwalk, Norwich, Stamford, Torrington, Waterbury, and Willimantic, CT.

Length: 48 hours (12 weeks); classroom instruction and supervised tutorial training.

Dates: January 1975—Present.

Objective: To train volunteers to teach basic reading and writing skills to adult illiterates on a one-to-one basis.

Instruction: History and organization of Literacy Volunteers of America; problem and scope of illiteracy among adults; techniques of teaching basic reading and writing; sensitivity to the environment of the functional illiterate; positive reinforcement; instructional materials; supportive agencies for referral; practical experience in tutoring. Conferences, area meetings, and inservice training are held in new materials, new techniques, and affiliate management.

Credit recommendation: In the upper division baccalaureate category or in the graduate degree category, 3 semester hours in Reading Instruction (2/76).

MARINE MIDLAND BANK

Management Techniques

Location: Marine Midland Center, Buffalo, NY.

Length: 68 hours (17 weeks).

Dates: September 1971—December 1977.

Objective: To introduce personnel with college backgrounds to specific applications of selected management concepts in commercial banking operations.

Instruction: Management concepts applied to commercial bank operations. Marketing research; forecasting; profit planning; money and portfolio management; branch banking; loan and deposit policy; customer contacts; personnel administration. Course includes a computerized commercial bank management simulation game.

Credit recommendation: In the upper division baccalaureate category, 3 semester hours in Banking and Management (2/75).

Officer Development Program

Location: Marine Midland Center, Buffalo, NY; various local colleges.

Length: 84 hours (8 months).

Dates: September 1972—December 1977.

Objective: To introduce assistant managers to the problems and processes of management with special reference to banking; to prepare them for increased managerial responsibilities.

Instruction: Introduction to integrative, general management problems and processes. Basic concepts of planning, leadership, communication, motivation, and decision analysis; introduction to functional areas of project management, finance, marketing, and labor relations; introduction to accounting principles. Emphasis is on the functional, day-to-day operating environment of a commercial bank (banking operations, sales and marketing, cost control, community relations, and personnel management). Course material is presented through reading assignments, class discussions, and lecture presentations. The course includes a management simulation experience emphasizing group problem-solving and decisionmaking behavior and an extensive analysis and report on a real bank management problem.

Credit recommendation: In the upper division baccalaureate category, 3 semester hours in Integrative General Management and 3 semester hours in Commercial Bank Management; or in the graduate degree category, 3 semester hours in General Management (2/75).

Personal Development Program

Location: Marine Midland Center, Buffalo, NY.

Length: 132 hours (44 weeks).

Dates: April 1975—December 1977.

Objective: To assist personnel in the development of techniques of management and banking skills in preparation for possible assignment into management.

Instruction: A survey of technical and management concepts relating to commercial banking. Marketing research; forecasting and profit planning; money and portfolio management; branch banking; loan and deposit policy; customer contracts; personnel administration; an introduction to accounting principles. Course includes a computerized commercial bank management simulation game.

Credit recommendation: In the lower division baccalaureate/associate degree category, 3 semester hours in Banking and Management (2/75).

NEW ROCHELLE HOSPITAL MEDICAL CENTER

Motivational Dynamics

Location: New Rochelle Hospital Medical Center, 16 Guion Place, New Rochelle, NY; Good Samaritan Hospital, 1000 Montauk Highway, West Islip, NY.

Length: 36 hours (12 weeks).

Dates: January 1976—July 1977.

Objective: To improve the effectiveness of upper level management personnel through increased knowledge of management practices and the behavioral sciences and their application on the job.

Instruction: Overview of motivational theory (McGregor, Freud, Maslow, and Herzberg); group dynamics; productivity and the maintenance of morale; effective supervision; participative management; the change process; the communication process; management by objectives; organizational development. The course includes lectures, discussion, video presentations, role plays, case studies, and in-basket exercises.

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 2 semester hours in Behavioral Science or Management (8/76).

NEW YORK BOTANICAL GARDEN

CONTINUING EDUCATION PROGRAM

Field Botany

1. **Field Botany (Cryptogams)**
2. **Field Botany (Phanerogams)**
   (Formerly Local Flora in Spring [Phanerogams])
3. **Plant Ecology**
   (Formerly Natural Vegetation [Ecology])

Location: New York Botanical Garden, Bronx, NY.

Length: 1. 12 hours (8 weeks).
2. 12 hours (8 weeks).
3. 12 hours (8 weeks).

Dates: September 1975—Present.

Objective: To provide the student with a study of plants in relation to their environment.

Instruction: Study of the ecosystem and primary production; description and classification of vegetation; vegetation dynamics; environmental gradient and plant distribution; forest types; history of local vegetation. Field trips are conducted to study local vegetation.

Credit recommendation: In the lower division baccalaureate/associate degree category, 3 semester hours in Ecology or Field Botany (9/75).

Field Botany (Cryptogams)

Refer to Field Botany.

Field Botany (Phanerogams)

Refer to Field Botany.

Local Flora in Spring (Phanerogams)

Refer to Field Botany.

Natural Vegetation (Ecology)

Refer to Field Botany.

Plant Ecology

Refer to Field Botany.

NEW YORK CITY DEPARTMENT OF EMPLOYMENT

The Department of Employment (DOE) was created to coordinate the manpower efforts of business, labor, and community organizations to meet the employment needs of New York City. Through 11 Comprehensive Manpower Centers and 26 Neighborhood Manpower Service Centers, unemployed persons are interviewed, counseled, tested, trained, and placed in jobs.

The Office of Staff Development and Training offers a wide range of courses to staff within the Department. The curriculum includes agency orientation, interviewing, supervision, communication skills, job development, organizational development skills, planning skills, case management, testing, and other courses tailored to meet specific requirements. Training is conducted both on site and at the Office's training facility where video tape and other technical aids provide versatility in structuring learning activities.

Source of official student records: Director, Department of Employment, Office of Staff Development and Training, 226 West 26th Street, New York, New York 10001.

Basic Interviewing (B II)

Location: 226 West 26th Street, New York, NY.

Length: 45 hours (15 weeks).

Dates: January 1974—Present.

Objective: To provide the student with a working knowledge of the interview process.

Instruction: Interviewing as a problem-solving skill; climate setting, developing trust, and opening and maintaining communication channels. Skills are developed through the use of films, reading materials, student logs, and video tape and practice interviews.

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 2 semester hours in Counseling, Education, or Social Science (8/75).

Case Management Supervision (D III)

Location: 226 West 26th Street, New York, NY.

Length: **Version 1:** 45 hours (15 weeks).
Version 2: 44 hours (11 weeks).

Dates: **Version 1:** August 1975—February 1976.
Version 2. March 1976—Present.

Objective: To train supervisors of case workers in supervisory practices, particularly as related to case supervision.

Instruction: Social and psychological analysis of the role of work in our society and the role of the case supervisor. Intensive application of the supervisory training of counselors utilizing the techniques of role playing, microsupervision, and case conferences. (Prerequisite: Basic Supervision or equivalent supervised experience.)

Credit recommendation: In the graduate degree category, 3 semester hours in Community Psychology, Counseling, Education, Industrial Psychology, or Social Work (8/75).

Descriptive Statistics

Location: 226 West 26th Street, New York, NY.

Length: 45 hours (15 weeks).

Dates: August 1975—Present.

Objective: To provide the student with an introduction to basic concepts of descriptive statistics.

Instruction: Basic measures of central tendency and variability; percentiles; regression; correlation; mathematical terminology and formulas used in basic statistics. The course provides practice in the computation and use of basic statistical indices and in the preparation of graphs and charts.

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 3 semester hours in Statistics (8/75).

Human Relations Laboratory: Personal Development and Group Dynamics (B XVI, E IX)

Location: 226 West 26th Street, New York, NY.

Length: 105 hours (15 weeks).

Dates: September 1973—Present.

Objective: To stimulate and support the personal growth of the student through the development of human relations skills and interpersonal insights.

Instruction: Application of theory and concepts toward the development of human relations skills (understanding the effect of one's behavior, listening and understanding others, giving and receiving feedback, and increasing effectiveness in shared leadership and membership functions) and interpersonal insights (sensitivity to others and self, understanding dynamics of groups). Techniques and resources include role playing, video taping, and a weekly log kept by each student.

Credit recommendation: In the upper division baccalaureate category, 6 semester hours in Behavioral and Social Sciences (3 theory, 3 laboratory) or in the graduate degree category, 6 semester hours in Counseling Psychology, Educational Psychology, Human Relations, Management Development, Public Administration, Recreation Administration, or Social Work (3 theory, 3 laboratory) (8/75).

Introduction to Basic Employment Assessment (B V)

Location: 226 West 26th Street, New York, NY.

Length: 45 hours (15 weeks).

Dates: September 1973—Present.

Objective: To provide participants with a basic understanding of psychometrics and specifically, employment-related testing.

Instruction: Administration and scoring of tests; interpretation of test results; helping clients relate test results to their vocational plans; psychometric terminology; introduction to basic psychometric statistics. Achievement, aptitude, personality, interest, and work-sample methods of evaluation are explored through the experiential method.

Credit recommendation: In the lower division baccalaureate/associate degree category, 2 semester hours in Counseling, Education, or Psychology (8/75).

Management Development (D IV)

Location: 226 West 26th Street, New York, NY.

Length: 105 hours (15 weeks).

Dates: September 1973—Present.

Objective: To provide managers, administrators, and supervisors with an understanding of the major functions of management and to develop the skills leading to managerial success.

Instruction: Theory and application of management by objectives and results. Goal planning and programming; problem solving; decisionmaking; managerial styles; communication; conflict management; influence; planned change. Emphasis is on group participation in a problem-solving setting. Techniques and resources include role playing, case studies, in-basket exercises, video taping, a notebook of relevant readings, and a weekly log kept by each student.

Credit recommendation: In the upper division baccalaureate category or in the graduate degree category, 6 semester hours in Business and/or Public Administration, Industrial Psychology, Labor Relations, or Social Work (8/75).

Manpower Vocational Counseling Techniques

Location: 226 West 26th Street, New York, NY.

Length: 45 hours (15 weeks).

Dates: August 1975—Present.

Objective: To train vocational counselors, employment interviewers, and related staff members in the use of counseling techniques with particular emphasis on manpower behavioral counseling.

Instruction: Assessment of client's wishes and potential; synthesizing the client's wishes and potential; negotiation of a compromise of this synthesis with the actual possibilities in the worlds of work and training. Emphasis is on vocational planning, career development, working on behavioral objectives, and vocational problem solving. (Prerequisite: Basic Interviewing or one year of supervised counseling experience.)

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 3 semester hours in Industrial Psychology or Vocational Counseling (8/75).

Micro-Interviewing

Location: Harlem Income Maintenance Center 32, 165 East 126th Street, New York, NY; 226 West 26th Street, New York, NY; various centers.

Length: 45 hours (15 weeks).

Dates: January 1975—Present.

Objective: To enable intake workers, case managers, and case workers to develop the basic skills needed to conduct various kinds of interviews.

Instruction: Indepth investigation of the interview as the forum for important communication between client and interviewer. By detailed examination of short segments of interviews, the students develop and practice interviewing skills. Students role play short interviews which are video and/or audio taped, receive feedback, and continue or redo the initial role play incorporating the suggestions made by the group. (Prerequisite: Basic Interviewing or six months supervised interviewing or counseling experience.)

Credit recommendation: In the upper division baccalaureate category or in the graduate degree category, 2 semester hours in Clinical Psychology, Counseling, Education, Social Work, or Sociology (8/75).

New York City Institutions that Affect the Unemployed (B X)

Location: 226 West 26th Street, New York, NY.

Length: 105 hours (15 weeks).

Dates: September 1974—Present.

Objective: To provide a field visit program to enable the student to observe and evaluate the nature of the various institutions that provide service to the poor.

Instruction: Lectures, discussions, and field visits to a variety of legal, health, and educational institutions that serve the clients of the students in the course. After each visit, each student prepares written observations and and evaluation of the delivery and use of the Services provided.

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 1 semester hour in Community Mental Health, Social Work, or Sociology (8/75).

NEW YORK CITY POLICE DEPARTMENT

INSERVICE COURSES

Basic Management Orientation Course

Location: Police Academy, 235 East 20th Street, New York, NY.

Length: **Version 1:** 210 hours (6 weeks).
Version 2: 140 hours (4 weeks).

Dates: **Version 1:** October 1974—September 1977.
Version 2: October 1977—Present.

Objective: To provide the police supervisor with the necessary management concepts and techniques to adequately perform his/her role.

Instruction: Development of management theory and its application to the law enforcement function; consideration of the works of Blake, Mouton, McGregor, Maslow, Herzberg, and others; the behavioral science approach to management; techniques of problem solving. Supervisory concepts and practices; legal duties of police supervisory personnel; administrative duties of first-line supervisors; motivation and training of personnel. Methods of instruction; communications structure; oral communications skill; managing intergroup relations; psychology of communication.

Credit recommendation: Version 1: In the upper division baccalaureate category, 3 semester hours in Communication and 3 semester hours in Personnel Management (10/76). **Version 2:** In the upper division baccalaureate category, 1 semester hour in Communication and 3 semester hours in Personnel Management (7/78).

NEW YORK STATE DEPARTMENT OF CORRECTIONAL SERVICES

The Department of Correctional Services is responsible for providing effective and efficient correctional programs in New York State. The Department employs approximately 13,000 persons, including some 5,500 correction officers, in work settings at 14 correctional facilities, five correctional camps, five community-based facilities, and nine area parole offfices.

The Training Academy provides entry-level training for new personnel, regular inservice programs for permanent staff, and management and executive development programs. Tuition support programs and liaison activities with higher education institutions are coordinated by the Bureau of Staff Development Personnel at the Academy.

Source of official student records: Director of Staff Development, Department of Correctional Services Training Academy, 1134 New Scotland Road, Albany, New York 12208.

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NEW YORK STATE DIVISION OF STATE POLICE

BASIC RECRUIT PROGRAM

The residential program attended by all newly appointed troopers of the State Police is now 20 weeks in length instead of 18 weeks. All credit recommendations remain the same.

NEW YORK STATE DIVISION OF SUBSTANCE ABUSE SERVICES

(Formerly NEW YORK STATE OFFICE OF DRUG ABUSE SERVICES)

The Division of Substance Abuse Services of the New York State Office of Alcoholism and Substance Abuse is responsible for the supervision of programs for the treatment and rehabilitation of substance abusers in New York State. The Division, formerly known as the New York State Office of Drug Abuse Services, operated as an autonomous division within the New York State Department of Mental Hygiene until that Department's reorganization effective April 1, 1978.

The Division operates a Bureau of Training and Resource Development which offers training both to the employees of the Division and to persons working in private substance abuse programs throughout the State. These staff development activities, directed toward job development and personal growth, are offered at a variety of locations throughout the State.

Source of official student records: Supervisor of Training and Resource Development, Bureau of Training and Resource Development, 95 Madison Avenue, Third Floor, New York, New York 10016.

NEW YORK STATE OFFICE OF DRUG ABUSE SERVICES

Refer to New York State Division of Substance Abuse Services.

NEW YORK TELEPHONE COMPANY

Advanced Data Training (A0000)

Location: 10 Columbus Circle, New York, NY.

Length: 90 hours (2 weeks).

Dates: June 1971—January 1975.

Objective: To equip communications consultants, account consultants, and sales managers with the knowledge necessary to recognize and satisfy business needs in the data market by providing efficient and effective communications.

Instruction: Fundamentals of computer systems; input-output systems and their operation; information storage and retrieval; computer programming; computer concepts, time sharing, data transmission, and data switching; computer language from simple binary numbers to twelve-level codes.

Credit recommendation: In the lower division baccalaureate/associate degree category, 3 semester hours in Computer Fundamentals (3/74).

Engineering Economy Principles (4067)

Location: Corporate Learning Center Engineering School, Hotel Thayer, West Point, NY.

Length: 45 hours (4 days); residential.

Dates: July 1973—January 1977.

Objective: To provide management personnel with an understanding of engineering cost study concepts and techniques and why such studies are essential to the financial structure of the New York Telephone Company.

Instruction: Capital-revenue-expense relationship; time value of money; annual charge rates; engineering economy study; profitability study; own versus lease study; retiring versus existing plant; division of revenue. Lecture-oriented, with several hours of problem-solving sessions.

Credit recommendation: In the upper division baccalaureate category, 3 semester hours in General and Cost Accounting Applications in Engineering (3/74).

Engineering Economy Techniques (4007)

Refer to Engineering Economy Techniques—CUCRIT Analysis (4007).

Engineering Economy Techniques—CUCRIT Analysis (4007)

(Formerly Engineering Economy Techniques [4007])

Location: Corporate Learning Center Engineering School, Hotel Thayer, West Point, NY.

Length: 55 hours (5 days); residential.

Dates: January 1970—Present.

Objective: To equip management personnel actively engaged in the preparation or review of cost studies with the ability to apply the proper engineering cost study techniques to given study situations.

Instruction: Capital-revenue-expense relationships; time value of money; annual charge rates; engineering economy study; team workshop project; profitability study; own versus lease study; division of revenue. Class time is equally divided between lecture periods and problem-solving sessions.

Credit recommendation: In the upper division baccalaureate category, 3 semester hours in General and Cost Accounting Applications in Engineering (3/74).

Instructional Technology Workshop (5034)

Location: Experimental Training Laboratory, 500 Eighth Avenue, New York, NY.

Length: 39 hours (5-7 days); programmed instruction.

Dates: January 1973—October 1977.

Objective: To provide new course developers with the necessary technology and processes to research, develop, implement, and validate training curricula.

Instruction: Overview of Instructional Technology. Objectives and goal analysis; criterion testing; training requirements; task analysis; instructional media and method validation. Emphasis is on the technical, rather than the theoretical, aspects of the teaching process. Instructor-led programmed instruction with subgroup and individual exercises.

Credit recommendation: In the lower division baccalaureate/associate degree category, 2 semester hours in Education (9/75). NOTE: While this credit recommendation applies only to the course as offered by the New York Telephone Company, the course is taught with substantially the same content and procedures in other Bell System Operating Companies throughout the United States.

Language Skills

Location: Experimental Training Laboratory, 500 Eighth Avenue, New York, NY.

Length: 180 hours (9-12 weeks); individualized program.

Dates: January 1968—June 1976.

Objective: To provide remediation for students in elementary English language skills.

Instruction: Comprehension and vocabulary development. Identification and use of parts of speech and standard English grammatical usage; standard English syntactical variations; decoding, pronunciation, and use of over 5,000 frequently used words; acquisition of meaning from complex, day-to-day syntax; development of skills in performing under time pressures and test conditions; development of comprehension and analysis skills. Self-paced, programmed instruction is enhanced by lectures, skill practice sessions, and audiovisual aids.

Credit recommendation: In the vocational certificate category or in the lower division baccalaureate/associate degree category, 1 semester hour in Language Skills (English) (11/74).

Mathematics

Location: Experimental Training Laboratory, 500 Eighth Avenue, New York, NY.

Length: 180 hours (9-12 weeks); individualized program.

Dates: January 1968—June 1976.

Objective: To enable the student to gain computational mastery of basic arithmetic skills.

Instruction: Basic arithmetic skills. Addition, subtraction, multiplication, and division of whole numbers, common fractions, and decimals; ratio; proportion; percentages. Diagnostic testing directs the students to individualized learning materials appropriate for their background. Criteria testing measures and monitors the understanding and progress of the students. Programmed instruction is enhanced by lectures, individualized instruction, simulations, and skill practice sessions.

Credit recommendation: In the vocational certificate category or in the lower division baccalaureate/associate degree category, 1 semester hour in Basic Mathematics (11/74).

Pre-Management Training Course (9004)

(Formerly Thirteen Week Pre-Management Training Course [9004])

Location: Traffic Management Training Center, 1790 Broadway, New York, NY.

Length: 350 hours (10 weeks); residential.

Dates: January 1964—Present.

Objective: To prepare potential managers to assume responsibilities of administering an Operator Services office.

Instruction: An integrated program which was broken into three parts for purposes of evaluation. **Part 1:** General management functions (including development of plans); personnel management functions (hiring and interviewing, motivation training, performance appraisal, payroll implementation, industrial relations, and indoctrination of new employees). **Part 2:** Review of all phases of force management cost control; development of statistical techniques and managerial considerations in formulation of policies regarding workload forecasting and personnel planning; peg count procedures; long- and short-range force programs; development of efficiency measurements. **Part 3:** Development of analytical skills in measuring service performance; knowledge of traffic department objectives; errors and irregularities; index plan, management observations, and speed of answer index; uniformity index; proper handling of customer contacts. Role playing used in situations requiring judgment on staff performance.

Credit recommendation: Part 1: In the upper division baccalaureate category, 6 semester hours in General Management (3/74). **Part 2:** In the upper division baccalaureate category, 3 semester hours in Managerial Planning, Operations Management, or Work Force Management (3/74). **Part 3:** In the upper division baccalaureate category, 3 semester hours in Operations Management (3/74).

Thirteen Week Pre-Management Training Course (9004)

Refer to Pre-Management Training Course (9004).

PORT AUTHORITY OF NEW YORK AND NEW JERSEY WORLD TRADE INSTITUTE

EVENING SCHOOL OF WORLD TRADE

As of September 1977, courses offered by the World Trade Institute's Evening School of Trade have been meeting on a 12-week schedule (one evening per week for 2½ hours, totaling 30 hours of instruction) rather than the previous 15-week schedule (one evening per week for 2 hours, totaling 30 hours of instruction).

Ocean Transportation

(Formerly Steamship Accounting)

Location: One World Trade Center, New York, NY.

Length: 30 hours (12 weeks).

Dates: September 1972—Present.

Objective: To provide an understanding of the uniform system of accounts for maritime carriers and financial and managerial accounting for the U.S. Maritime Industry.

Instruction: Organization of financial department; general and administrative expenses; assets; liabilities; voyage accounting; revenue; documentation; vessel expenses; voyage expenses; vessel payrolls; container and barge expense; claims; agents; computer in steamship industry; regulatory agencies; financial statements; analysis of capital structure; subsidy accounting. (Prerequisite: Two years of college accounting.)

Credit recommendation: In the upper division baccalaureate category or in the graduate degree category, 2 semester hours in Accounting or Transportation (5/77).

Steamship Accounting (Maritime Accounting)

Refer to Ocean Transportation.

RED HOOK FAMILY DAY CARE TRAINING CENTER OF NEW YORK

(Formerly FAMILY DAY CARE TRAINING CENTER AT RED HOOK)

The Red Hook Family Day Care Training Center of New York was established in 1972 to provide day care training for persons who care for children in their homes. Training modules and resource materials have been developed to enable the Center's outreach teachers to offer training services throughout New York City in 35 Cluster Programs. Training sessions are geared to equip the home day care providers, known as provider teacher-parents, with a range of skills that will enable them to give the children an educational experience rather than to merely provide a babysitting service. Training is conducted at the various centers using community resources and responding to particular needs as identified by Family Day Care staff and parents.

Source of official student records: Educational Director, Red Hook Family Day Care Training Center, 500 Eighth Avenue, Room 1020, New York, New York 10018.

Children's Literature

Location: 500 Eighth Avenue, New York, NY; 35 Cluster Centers throughout New York City.

Length: 30 hours (15 weeks).

Dates: April 1976—Present.

Objective: To enable the day care parent to understand that children's literature assists in strengthening the child's basic motivation for learning by developing language skills; to familiarize the parent with good literature for young children through the analysis of children's books.

Instruction: Relevance of literature in a child's life; book assessment skills; racism and sexism in children's literature; reading readiness concepts and skills; types of books and their uses; producing a book; agencies and persons in the field; poetry for children; storytelling; nursery rhymes.

Credit recommendation: In the lower division baccalaureate/associate degree category, 2 semester hours in Children's Literature (1/76).

The Creative Experience

Location: 500 Eighth Avenue, New York, NY; 35 Cluster Centers throughout New York City.

Length: 40 hours (20 weeks).

Dates: January 1976—Present.

Objective: To enable the day care parent to understand the importance of creative activities in a child's development and ways in which creative expression can be encouraged.

Instruction: Exploration of ways in which creative activities can be used constructively with children, with emphasis on practical home experiences. Clay play; block building; fingerpainting; potato printing; water play; music; puppetry; graphic techniques; crayon resist; ink wash-off; murals; montage; papier mâche; paper bag masks; arts and crafts; edible arts; line fantasies; school-age crafts; woodworking.

Credit recommendation: In the lower division baccalaureate/associate degree category, 2 semester hours in Early Childhood Education (1/76).

Health, Safety, and Nutrition Issues in Family Day Care

Location: 500 Eighth Avene, New York, NY; 35 Cluster Centers throughout New York City.

Length: 30 hours (15 weeks).

Dates: September 1975—Present.

Objective: To provide the day care parent with knowledge of health, nutrition, and safety and their effect on the growth and development of children.

Instruction: Positive aspects of health (hygiene and good eating habits); children's diseases; emergency first aid procedures; accident prevention; fire emergencies; safety hazards in the home; meal planning and the necessity for a well-balanced diet; consumer education.

Credit recommendation: In the lower division baccalaureate/associate degree category, 2 semester hours in Early Childhood Education, Family Living, Home Economics, Nursing, or Nutrition (1/76).

Math and Concept Development

Location: 500 Eighth Avenue, New York, NY; 35 Cluster Centers throughout New York City.

Length: 30 hours (15 weeks).

Dates: September 1975—Present.

Objective: To familiarize the day care parent with the many materials and activities available to enable them to help children develop mathematical skills and concepts.

Instruction: Subject areas of mathematics; approaches to teaching mathematics; mathematical concepts of logic and problem solving, sets, numbers, arithmetic functions, measurements, geometry, and probability.

Credit recommendation: In the lower division baccalaureate/associate degree category, 2 semester hours in Early Childhood/Elementary Education (1/76).

Science for Children in Family Day Care

Location: 500 Eighth Avenue, New York, NY; 35 Cluster Centers throughout New York City.

Length: 30 hours (15 weeks).

Dates: September 1975—Present.

Objective: To introduce the day care parent to simple scientific activities for children and to help them understand that children learn scientific concepts through everyday living.

Instruction: Sensory concepts for young children; plant exploration; animal exploration; anatomy and hygiene; physical forces other than life forces; food experiments; water play.

Credit recommendation: In the lower division baccalaureate/associate degree category, 2 semester hours in Early Childhood/Elementary Education (1/76).

Stages and Patterns of Growth and Development for Children in Family Day Care

Location: 500 Eighth Avenue, New York, NY; 35 Cluster Centers throughout New York City.

Length: 30 hours (15 weeks).

Dates: January 1976—Present.

Objective: To provide the day care parent with knowledge and understanding of the process of child growth and development from birth through adolescence.

Instruction: Fundamentals of child development: prenatal care; infant care; physical, mental, and social needs of toddlers, preschoolers, school-age children, and adolescents. Methods and materials: analysis, observation, and implementation of activities that will enrich the development of children from infancy through adolescence. Trends and issues of child development: controversial topics, theories of well-known educators. Sex identification and sex education.

Credit recommendation: In the lower division baccalaureate/associate degree category, 2 semester hours in Child Development (1/76).

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ST. LUKE'S HOSPITAL CENTER

Motivational Dynamics

Location: St. Luke's Hospital Center, Amsterdam Avenue and West 114th Street, New York, NY.

Length: 36 hours (12 weeks).

Dates: November 1975—Present.

Objective: To improve the effectiveness of practicing first-line supervisors through increased knowledge of management practices and the behavioral sciences and their application on the job.

Instruction: Overview of motivational theory (McGregor, Freud, Maslow, and Herzberg); group dynamics; productivity and the maintenance of morale; effective supervision; participative management; the change process; the communication process; management by objectives; organizational development. The course includes lectures, discussion, video presentations, role plays, case studies, and in-basket exercises.

Credit recommendation: In the lower division baccalaureate/associate degree category or in the upper division baccalaureate category, 2 semester hours in Behavioral Science or Management (8/75).

SEAMEN'S CHURCH INSTITUTE OF NEW YORK

FRANKLIN D. ROOSEVELT INSTITUTE OF MARITIME AND GENERAL STUDIES

Computer Concepts for the Transportation Industry

(Formerly EDP (Computer) Techniques for the Transportation Industry)

Location: 15 State Street, New York, NY.

Length: 24 hours (12 weeks).

Dates: September 1973—Present.

Objective: To provide the student with an introduction to electronic data processing in the maritime transportation industry.

Instruction: Introduction to computers and electronic data processing. Computer hardware and software; data communications; system design and logic; data processing applications in the transportation industry.

Credit recommendation: In the lower division baccalaureate/associate degree category, 1 semester hour in Transportation Operations and Management (2/76).

EDP (Computer) Techniques for the Transportation Industry

Refer to Computer Concepts for the Transportation Industry.

Pricing Techniques for Intermodel Transportation

(Formerly Pricing Techniques for the Transportation Industry)

Location: 15 State Street, New York, NY.

Length: 24 hours (12 weeks).

Dates: September 1975—Present.

Objective: To provide the student with the basics of the transportation pricing function within the maritime industry.

Instruction: Overview of pricing techniques for intermodal transportation; transportation and economic growth; supply and demand; theory of costs; shipping costs and their relation to freight rates; structure of the freight rate system; the shipping conference system and free markets; government and its role in transportation pricing.

Credit recommendation: In the lower division baccalaureate/associate degree category, 1 semester hour in Transportation Operations and Management (2/76).

Pricing Techniques for the Transportation Industry

Refer to Pricing Techniques for Intermodal Transportation.

SPERRY DIVISION OF SPERRY RAND CORPORATION

The headquarters of the Sperry Division, which is located in Great Neck, New York, consists of Sperry Gyroscope, Sperry Marine Systems, and Sperry Systems Management. The division has a long history of producing high-technology products for ship navigation, guidance, and control and has branched into new areas of technology application, primarily computer-based traffic control and transportation systems, and marine simulators.

Sperry's Program for Advancing Careers through Education (SPACE) is a voluntary, after-hours program available to all Great Neck employees. The program offers an extensive series of engineering and computer science courses as well as courses in management and general skills development.

Source of official student records: Management Development and Training Department, Sperry Division, Sperry Rand Corporation, Great Neck, New York 11020.

Sonar System Seminar (T-403-1)

Location: Division headquarters, Great Neck, NY.

Length: 30 hours (15 weeks).

Dates: September 1973—Present.

Objective: To provide the student with an understanding of the various functions performed by a sonar system and the hardware approaches for implementing them.

Instruction: Design techniques used in sonar systems; components of a modern digital sonar system; computer technology as applied to sonar; the UYK-7, UYK-20, SP630, and SP900; sonar beamforming and its implementation by various methods (analog delay line, shift register—DIMUS, digital computer, high-speed microprogrammable processor). Lectures are presented by specialists in each

Credit recommendation: In the graduate degree category, 2 semester hours in Engineering or Marine Science (5/75).

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APPENDIX A

Information on Evaluations Conducted by Other Program Offices

The following organizations have had courses evaluated by the Program in California since July 1977. Further information on these organizations and the evaluated courses may be obtained by contacting:

Program on Noncollegiate Sponsored Instruction
The Consortium of the California State University
and Colleges
400 Golden Shore
Long Beach, California 90802
Telephone: (213) 590-5696

Anaheim Savings and Loan Association (Anaheim, CA)

Atlantic Richfield Company (Los Angeles, CA)

Bank of America (San Francisco, CA)

Blue Cross of Northern California (Oakland, CA)

The California Department of Forestry—Fire Academy (Ione, CA)

California Department of General Services (Sacramento. CA)

California State Police (Sacramento, CA)

Crocker National Bank (San Francisco, CA)

Far West Services, Inc. (Irvine, CA)

Fluor Corporation (Irvine, CA)

General Dynamics, Pomona Division (Pomona, CA)

General Telephone Company (Santa Monica, CA)

Insurance Educational Association (San Francisco, CA)

Jet Propulsion Laboratory (Pasadena, CA)

The Lockheed Missiles and Space Company, Inc. (Sunnyvale, CA)

Sacramento, City of

Sacramento, County of

San Diego Employers Association, Inc. (San Diego, CA)

Southern California Edison Company (Rosemead, CA)

Southern California Gas Company (Los Angeles, CA)

State of California Employment Development Department (Sacramento, CA)

Young Men's Christian Association of Metropolitan Los Angeles (Los Angeles, CA)

The following courses have been evaluated and have received credit recommendations by the Program in Pennsylvania since July 1977. Further information on these courses may be obtained by contacting:

Program on Noncollegiate Sponsored Instruction
Office of Lifelong Learning
Department of Education
Box 911
Harrisburg, Pennsylvania 17126
Telephone: (717) 783-8228

Opportunities Academy of Management Training, Incorporated (Philadelphia, PA)

Affective Education
Comprehensive Employment and Training Act
Corporate Planning for Nonprofit Organizations (MSDC VI)
Counseling for the Disadvantaged
Functions of a Manager (MSDC I)
Improving Management Skills (MSDC III)
Introduction to Accounting and Internal Control
Job Development for the Disadvantaged
Management Control in Nonprofit Organizations
Management and Ownership Training
Management Through Teamwork (MSDC II)
Manpower Services to Disadvantaged Youth
Motivating the Disadvantaged
Open-Entry/Open-Exit Skill Training
Personnel Management (MSDC V)
Pre-Vocational Training
Program Assessment and Evaluation
Program Planning Design and Implementation
Tools for Better Management (MSDC IV)
Vocational Education Instruction

Pittsburgh Psychoanalytic Center, Inc. (Pittsburgh, PA)

The Application of Psychoanalytic Concepts to Therapy and Counseling (Seminar B)
Basic Psychoanalytic Theory (Seminar C)
Life Cycle From a Psychoanalytic Perspective (Seminar A)

Westinghouse Electric Corporation (Pittsburgh, PA)

Business Management Course (871)
Computer Concepts (885)
Concepts of Distribution Management (768)
Dynamics of Applied Marketing Management (771)
Economics of Competition Seminar (637)
Management Functions and Policies (869)
Management Techniques (867, 868)
Marketing Analysis and Forecasting Seminar (762)
Marketing Communications Concepts and Planning Seminar (767)
Marketing Management Course (752)
Marketing Strategy and Business Planning Seminar (790)
Models for Management (900/890)
Multinational Seminar (770)
Professional Marketing Course (456)
Sales Management Course (761)
Techniques of Finance and Accounting (864)

APPENDIX B
List of Evaluators

The persons listed below served as evaluators for the Program on Noncollegiate Sponsored Instruction for the first time during the period June 1977 through July 1978. For a listing of evaluators serving prior to that time, consult Appendix B of the 1977 *Guide*.

Allan S. Ashley
Associate Professor and Chairman
Department of Administrative Sciences
School of Business Administration
Adelphi University

James L. Bailey
Instructor
Blue Cross/Blue Shield of Greater New York

Daniel C. Beckhorn
Senior Instructor
School of Vocational Studies
State University of New York at Alfred

Marion Lucille Blake
Lecturer in English
Rockland Community College

Joseph B. Board
Professor of Government
Union College

LeRoy Brendel
Academic Dean
Interboro Institute
New York, New York

June N. Brodie
Director, Graduate Program (MS) Nursing
Herbert H. Lehman College—The City University of New York

Robert R. Bugbee
Director, School of Radiography
The New York Hospital
Cornell University Medical College

Howard Chapnick
President
Black Star Publishing Company
New York, New York

Carl Chiarenza
Chairman, Art History Department
Boston University

Thomas L. Clarke
Director, Career Skills
Mutual Benefit Life Insurance Company
Newark, New Jersey

Jeanne Marie Col
Assistant Professor
Graduate School of Public Affairs
State University of New York at Albany

Barbara Crane
Associate Professor of Photography
School of the Art Institute of Chicago

Rhea Culver
Instructor
Human Resource Center
Albany, New York

Sr. Marian James Deegan
Associate Professor of Business
Elizabeth Seton College

Andrew J. DuBrin
Professor, Behavioral Sciences
Rochester Institute of Technology

Charles R. Ennis
Associate Professor
Thames Valley State Technical College
Norwich, Connecticut

Joel Evans
Assistant Professor
School of Business
Hofstra University

Thomas M. Farley
Vice President
Manufacturers Hanover Trust Company
New York, New York

José Femenia
Chairman, Engineering Department
SUNY Maritime College

Larry Flicker
Professor and Chairman
Department of Electrical Technology
New York City Community College

Anne B. Fosbre
Associate Professor of Accounting
Pace University

Myron H. Goldberg
MIS Coordinator
Pace University

Allen W. Goodwin
Manager, Management Development and Training
Anheuser Busch, Inc.

John Gray
Chairman, Department of Health Sciences
Brooklyn Center, Long Island University

Pasquale A. Grillo
Training Director
Manufacturers Hanover Trust Company
New York, New York

Charles Guzzetta
Professor
Hunter College—The City University of New York

Louis L. Hattman
Chief, Development Branch
Staff and Faculty Development and Training Division
U.S. Army Signal School
Fort Gordon, Georgia

Conrad E. A. Herr
Associate Professor in Community Medicine
College of Medicine and Dentistry of New Jersey
Rutgers Medical School

Robert S. Hirschfield
Professor and Chairman
Department of Political Science
Hunter College—The City University of New York

George R. Hoguet
Vice President
Bankers Trust Company
New York, New York

John Kazanjian
Adjunct Assistant Professor
Division of Business and Management
New York University

John M. Kikta, Jr.
Vice President and Manager
Personnel
Lincoln First Bank of Rochester
Rochester, New York

Samuel Kleinman
Chairman, Accounting Department
Norwalk Community College
Norwalk, Connecticut

Vernon R. Kopf
Program Coordinator
Automotive Technology
Rockland Community College

N. Paul Loomba
Professor and Chairman
Department of Management
Bernard Baruch College—The City University of New York

Thomas B. Lukers
Electronics Instructor/Counselor
Angelina College
Lufkin, Texas

L. Whit Marks
Professor of Physics
Central State University
Edmond, Oklahoma

Floyd E. Masten
Assistant Professor
Rockland Community College

John T. McCall
Associate Dean
Westchester Graduate School of Business
Pace University

Edmund J. McTernan
Dean, School of Allied Health Professions
State University of New York at Stony Brook

JoAnne H. Misener
Dean of Secretarial School
Bryant & Stratton Business Institute

Donald R. Moscato
Associate Dean
School of Business Administration
Iona College

Masakuni Nakazono
Instructor
Norwalk State Technical College
Norwalk, Connecticut

Richard A. Nystrom
Associate Director and Professor
Albany-Hudson Valley Physician's Assistant Program

C. Leonard O'Connor
Professor/Chairman, Department of Radiological
and Health Sciences
Manhattan College

Robert Posnak
Partner
Ernst & Ernst

Carol K. Ritter
Clinical Assistant Professor
Department of Physical Therapy
New York University

Leonard S. Romney
Chairperson, Human Services
Rockland Community College

Judith Rose
Teacher
BOCES #2
Spencerport, New York

Yvonne Rosecrans
Associate Professor
Erie Community College

John E. Sands
Professor of Law
Albany Law School
Union University

John N. Sarrubbo
Assistant Professor
Mechanical Technology
Westchester Community College

James Satterwhite
Director, Office of Staff Development
Human Resources Administration
City of New York

Aaron Schmais
Coordinator, Undergraduate Social Work Program
New York University School of Social Work

Theodore Schwartz
Professor and Chairman
Department of Management and Marketing
Iona College

Martin L. Scott
Biomedical Photographic Specialist
Scientific and Technical Photography Group
Eastman Kodak Company
Rochester, New York

Peter Semanchuk
Professor, Chairman, and
Mechanical Technology Coordinator
Erie Community College

Robert Smith
Director of Biomedical Communications
New York State College of Veterinary Medicine

Daniel L. Staunton
Ule Mo Co Occupational School
Brockport, New York

Arthur J. Sweat
Assistant Professor
Engineering Technology
Memphis State University

Kazuye Takei
Professor and Chairperson
Secretarial Science Department
Bronx Community College

Miriam Tatzel
Associate Professor
Empire State College
State University of New York

Russel R. Taylor
Director of Business Programs and Assistant Professor
College of New Rochelle

Morton Temsky
Chairman, Business and Law Department
Schenectady County Community College

Melvin D. Thornhill
Chairman, Department of Radiologic Technology
Westchester Community College

Ernest B. Uthgenannt
Assistant Professor
University of Connecticut

Ira Richard Weiss
Assistant Professor of Accounting
New York University
Graduate School of Business Administration

Florence D. Wiener
Director, Communication and Learning Center
Marymount Manhattan College

Richard D. Zakia
Professor
Rochester Institute of Technology

APPENDIX C
Program Policies and Procedures

The following policies and procedures for the evaluation of noncollegiate sponsored courses were approved by the New York State Board of Regents and the Commission on Educational Credit of the American Council on Education in the fall of 1975.

Eligibility

1. Organizations eligible to submit educational programs for review are noncollegiate institutions whose primary focus is not education, such as private industry, governmental agencies, labor unions, voluntary associations, and professional associations. Participation in the Program is on a voluntary basis, with each organization choosing, in consultation with Program staff, those courses which it wishes to submit for evaluation.

2. Only educational programs or courses conducted on a formal basis and with official approval of the sponsoring organization will be considered. Courses must be under the control of the sponsoring organization. Informal on-the-job training and job experience will not be reviewed.

The following guidelines shall be used in selecting courses or programs for review:

a. The material presented in each course must be on the postsecondary level.

b. The instructors should be selected on the basis of their qualifications to teach the subject matter, including their formal education and experience.

c. The course should serve people who can use the credit recommendations toward a postsecondary credential.

d. Appropriate procedures (tests, projects, oral quizzes, etc.) must be used in the courses to evaluate student performance. Correspondence and independent study courses must include a proctored examination administered under secure conditions.

e. Intensive courses should be of at least five days duration (35–40 hours of instruction).

f. Intensive technical courses involving laboratory or workshop exercises should be at least 10 days in length (70–80 hours of instruction).

g. Courses conducted over an extended period of time should contain at least 30 hours of instruction.

h. Individual courses that do meet the above time requirements may be grouped together for purposes of review.

i. Courses that have not been offered during the preceding five years will not be reviewed.

Documentation

3. Sponsoring organizations will submit information concerning the administration of their educational programs. On the basis of this information, Program staff will decide whether the organization demonstrates sufficient stability and control to present its courses for review. Information submitted will include a description of the administration of the training function, procedures for selecting and evaluating instructional staff, procedures for course development, evaluation, and revision, and procedures for insuring consistent quality in programs delivered at multiple locations. This submission will be a part of the Program's permanent record on the sponsoring organization.

4. Each participating organization must maintain permanent and official records of students' participation and performance in any course which is reviewed. The sponsoring organization must demonstrate the capability to store and retrieve student records for the period covered by the credit recommendations.

5. For the evaluation of courses involving classroom instruction the following information must be submitted:

a. Course syllabus describing the objectives and content.

b. Instructional materials used for the course (textbooks, audiovisual materials, case studies, problems, etc.).

c. Required or suggested qualifications of course participants.

d. Qualifications of instructional staff.

e. Techniques used to evaluate student performance (including samples, if available).

f. Duration of the course.

6. For courses and programs involving other instructional approaches, e.g., self-paced or independent study courses, some of the foregoing information is neither appropriate nor relevant to the process. However, appropriate and available items must be provided in sufficient detail to allow each course to be judged by the review team.

Course Review

7. Preferably, each review session will be conducted at the training site of the sponsoring organization. Wherever the session is held, persons from the organization should be available to answer questions that arise during the review of the course materials and to describe the process by which the curriculum is developed, evaluated, and revised. For reviews at the graduate level, site visits are mandatory.

Selection of Reviewers

8. In conducting course reviews, no fewer than three subject-matter specialists in the field under consideration will be used. The names of individuals to serve in this capacity will be solicited from postsecondary institutions, professional and educational associations, accrediting agencies, and noncollegiate organizations. In general, the review team will include one practitioner from a noncollegiate organization.

9. The following criteria will be considered in selecting course reviewers:

a. Area of reviewer competence as evidenced by formal training and experience will closely approximate area of courses being reviewed.

b. Preference will be given to reviewers who have had five years or more teaching experience (with the exception of the practitioner noted in 8 above).

c. Preference will be given to reviewers with experience in curriculum development, e.g., membership on a curriculum committee (with the exception of the practitioner noted in 8 above).

d. Preference will be given to reviewers who are generally receptive to granting credit for learning in noncollegiate settings.

Evaluative Criteria

10. In the exercise of their professional judgment, review team members will consider the following factors in determining a credit recommendation:

a. The subject matter of a course, its level of difficulty, and its applicability to a range of postsecondary programs. These factors are of primary importance.

b. Distinctive aspects of noncollegiate education, including the background and selection of both instructors and students, the duration of a course, ongoing application of classroom learning in the students' work, and motivational factors.

c. Duration and concentration of effort in relationship to the generally accepted practice for determining credit in postsecondary institutions. Normally, academic credit is assigned on the basis of one semester credit hour for each 15 classroom contact hours plus 30 hours of outside preparation or equivalent; one semester credit hour for each 30 hours of laboratory work plus necessary outside preparation or equivalent; one semester credit hour for not less than 45 hours of shop instruction (contact hours or equivalent). Credit recommendations made by reviewers shall not, however, be derived by a simple arithmetic conversion. Intensive

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courses offered by noncollegiate organizations do not necessarily require as much outside preparation as many regular college courses. Reviewers should consider the factors of pre- and post-course assignments, prior work-related experience, the concentrated nature of the learning experience, and the reinforcement of the course material gained in the subsequent work setting.

Credit Recommendations

11. Credit recommendations will be reported in the following categories:

a. *Vocational Certificate*. This category describes course work of the type normally found in nondegree (certificate) programs, which are usually a year or less in length and designed to provide students with occupational skills. They can also be found in some curricula leading to associate degrees in applied science. Course content is specialized, and the accompanying shop, laboratory, or similar practical components emphasize procedural more than analytical skills.

b. *Lower Division Baccalaureate/Associate Degree*. This category describes course work of the type normally found in the first two years of a baccalaureate program and in programs leading to the Associate in Arts, the Associate in Science, or the Associate in Applied Science degrees. The instruction stresses development of analytical abilities at the introductory level. Verbal, mathematical, and scientific concepts associated with an academic discipline are introduced, as are basic principles. Occupationally oriented courses in this category are normally designed to prepare a student to function as a technician in a particular field.

c. *Upper Division Baccalaureate*. This category describes courses of the type found in the last two years of a baccalaureate program. The courses involve specialization of a theoretical or analytical nature beyond the introductory level. Successful performance by students normally requires prior study in the area.

d. *Graduate Degree*. This category describes courses with content of the type found in graduate programs. These courses often require independent study, original research, critical analysis, and scholarly and professional application of the specialized knowledge or discipline. Students enrolled in such courses normally have completed baccalaureate work.

12. A credit recommendation will apply retroactively to the date the course was offered substantially in the same form as seen at the review. Procedures for reporting and recording students' successful completion of the course must extend to the point to which the credit recommendation is backdated. In no case shall recommendations be made retroactive beyond 10 years from the time of review.

Updating Recommendations

13. Credit recommendations will be kept current by the following procedures:

a. At five-year intervals, each course will be reviewed, preferably on site, by a subject-matter specialist to determine if the credit recommendation is still applicable. Preferably, this subject-matter specialist will have been a member of the team that established the initial recommendation. The course materials will be compared with those used at the time of the initial review. Those courses which are judged to have undergone substantive changes will be re-evaluated by a full team.

b. At regular intervals in the five-year period following the review of a course, a participating organization will submit information on each course for which a credit recommendation has been established. Any indication of a substantive change in a course will result in a re-evaluation of the course.

Publications

14. In Program publications, course review results will be reported in displays containing the following information: name of course; organization course number, when available; location; length in contact hours and days or weeks; dates covered by the recommendation; statement of objectives; description of course content and instruction; credit recommendation in the appropriate category or categories and subject area(s); and date of review.

15. For courses which are assigned credit recommendations, results will be published. Results need not be published for courses where credit recommendations are not assigned, but these must be made available if requested by affected institutions or students.

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